SHOUT
SHARE
IT

ZS 2702

TABLE OF CONTENTS

	Page
Financial Assistance to the Commission	2
Staff of the Commission's Office	3
Comment on *Attus audax* Hentz, 1845 as type species of *Phidippus* Koch, 1846 (Aranea): rebuttal of objections to designation (G.B. Edwards & B. Cutler)	4
Comments on request for a declaration modifying Article 1 so as to exclude names proposed for domestic animals from zoological nomenclature (R.G. Van Gelder; C.P. Groves)	5
Further proposed amendments to the International Code of Zoological Nomenclature (The Secretary)	11
Comments by zoologists on the Draft Code (J.D. Holloway & G.S. Robinson; W.O. Cernohorsky)	15
The case for multiple type specimens in parasitic protozoa (P.C.C. Garnham, R.S. Bray & R. Killick-Kendrick)	17
Opinion 1125. *Ceratophyllus soricis* Dale, 1878 (Insecta: Siphonaptera): designation of a neotype under the plenary powers	22
Opinion 1126. *Tanagra cyanea* Linnaeus, 1766 (Aves) conserved	24
Opinion 1127. *Planaria montenigrina* Mrazek, 1904 (Platyhelminthes) given nomenclatural precedence over *Phagocata cornuta* Shishkov, 1903	27
Bucephalus Baer, 1827 and *B. polymorphus* Baer. 1827 (Trematoda): proposed use of the plenary powers to conserve these names in accordance with general use (B. Baturo)	30
Prohysteroceras Spath, 1921 and *Neokentroceras* Spath, 1921 (Cephalopoda, Ammonoidea): proposed designation of type species in conformity with established usage (C.W. Wright & M.R. Cooper)	37
Tipula ferruginea Fabricius, 1805 (Diptera: TIPULIDAE): proposed conservation (G.W. Byers)	40
Ochthera exsculpta Loew, 1862 (Insecta, Diptera, EPHYDRIDAE): request for invalidation of neotype and validation of a rediscovered holotype (P.J. Clausen)	42
Staphylinus fulgidus as the type species of several Staphylinid genera (Insecta, Coleoptera, STAPHYLINIDAE) (A. Smetana)	44
METRIDIIDAE Carlgren, 1893 (Anthozoa) and METRIDIIDAE Sars, 1902 (Copepoda): request for a ruling to eliminate the homonymy (D. Fautin Dunn & K. Hulsemann)	53
Gnathodus Pander, 1856 (Conodonta): proposed designation of a type species under the plenary powers (H. Richard Lane & W. Ziegler)	57
Report on the generic names *Eriophyes* Siebold, 1851, and *Phytoptus* Dujardin, 1851 (Acarina) (The Secretary)	63
International Code of Zoological Nomenclature: result of vote on proposals for substantive amendments (first instalment) (The Secretary)	66
Proposed addition to the species group of names for taxa differentiated by geographical criteria (G. Bernardi & R.V. Melville)	71

Opinion 1128. *Platyrhacus* Koch, 1847 (Diplopoda): designation of *Platyrhacus fuscus* Koch, 1847 as type species 73
Opinion 1129. *Vulpes* Frisch, 1775 (Mammalia) conserved under the plenary powers 76
Opinion 1130. *Lilioceris* Reitter, 1912 (Insecta: Coleoptera): correction of type species 79
Opinion 1131. *Amphisbaena mildei* Peters, 1878 (Reptilia): suppressed under the plenary powers 82
Opinion 1132. Two works by Hemprich & Ehrenberg, 1828, suppressed under the plenary powers; *Heterotis* Rüppell, 1829, *ex* Ehrenberg MS (Pisces) validated under the plenary powers and placed on the Official List with *Arapaima* Müller, 1843 (Pisces) 85
Opinion 1133. Suppression under the plenary powers of names for genera and species of Amphipoda proposed by Rafinesque between 1814 and 1820 91
Opinion 1134. *Zerynthia* Ochsenheimer, 1816 (Insecta; Lepidoptera): conserved under the plenary powers 102
Opinion 1135. *Murex lotorium* Linnaeus, 1758 (Gastropoda); ruling on interpretation 105
Opinion 1136. *Cicadetta strepitans* Kirkaldy, 1909 (Insecta; Homoptera): conserved 107
Opinion 1137. *Aphis gossypii* Glover, 1877 (Insecta; Homoptera) validated under the plenary powers 109
Opinion 1138. *Giraffa camelopardalis australis* Rhoads, 1896 (Mammalia) suppressed 111
Opinion 1139. *Paraonis* Grube, 1873 (Polychaeta, PARAONIDAE): designation of a type species under the plenary powers 114
Opinion 1140. *Sesarma rubripes* Rathbun, 1897 (Crustacea Decapoda) given precedence over *Sesarma trapezium* Dana, 1852, under the plenary powers 119
Opinion 1141. *Donacilla* Blainville, 1819 (Bivalvia) suppressed; *Donacilla* Philippi, 1836, *Mesodesma* Deshayes, 1832 and *Semele* Schumacher, 1817 (Bivalvia) added to the Official List 122
Opinion 1142. Family-group names based on *Platystoma* Meigen, 1803 given precedence over those based on *Achias* Fabricius, 1805 (Diptera) 125
Opinion 1143. *Kerrichiella* Rosanov, 1965 (Hymenoptera): designation of a type species under the plenary powers 130
Opinion 1144. *Phloeotribus* (Coleoptera: SCOLYTIDAE) ruled to be a justified emendation of *Phloiotribus* Latreille, 1796 132
Obituary: Mr. N.D. Riley, C.B.E. 137
Obituary: Dr. C.L. Hubbs 138
Comment on *Pleurocera* Rafinesque, 1818: proposed designation of type species (J.P.E. Morrison, J. Rosewater, A.H. Clarke, C.B. Stein, Secretary's observations on Dr. Stein's comments, G.M. Davis) 139
Comment on *Pectinaria* Lamarck, 1818: proposals on generic name (K. Banse) 146
Comment on *Conus fergusoni* G.B. Sowerby III, 1873: proposed validation (W.O. Cernohorsky) 147

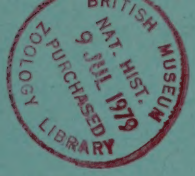
Opinion 1145. *Dryocoetes* Eichhoff, 1864 (Coleoptera, SCOLYTIDAE): conserved under the plenary powers 149
Opinion 1146. *Xyleborus* Eichhoff, 1864 (Coleoptera, SCOLYTIDAE): conserved under the plenary powers 151
MEROPIDAE (Aves): proposed amendment of Entry in Official List of Family-Group Names in Zoology (P.S. Tomkovich and G.N. Kashin) 154

Sciaena nibe Jordan & Thompson, 1911 (Pisces): proposed conservation of the specific name *nibe* by use of the plenary powers. (E. Trewavas) 155
Panopeus H. Milne Edwards, 1834 (Crustacea, Decapoda): proposed designation of type species under the plenary powers (L.B. Holthuis) 158
Anaspis Muller, 1764; *Luperus* Muller, 1974; *Lampyris* Müller, 1764; and *Clerus* Müller, 1764 (Insecta Coleoptera): proposed designation of type species (H. Silfverberg) 161
Ptilium Gyllenhal, 1827 and *Ptenidium* Erichson, 1845 (Insecta, Coleoptera): proposed conservation by use of plenary powers (H. Silfverberg) 167
Chrysomela flavicornis Suffrian, 1851 and C. *tibialis* Suffrian, 1851 (Insecta, Coleoptera): proposed conservation by use of the plenary powers (H. Silfverberg) 171
Edwardsia Costa, 1834 (Arthropoda, Crustacea): proposed suppression with conservation of *Edwardsia* de Quatrefages, 1841 and EDWARDSIIDAE Andres, 1881 (Coelenterata, Actinaria) (R.B. Williams) 175
Muscicapa ruficauda Swainson, 1838 (Aves, MUSCICAPIDAE): proposed designation of neotype by use of plenary powers (C.W. Benson) 180
Polynoe Savigny, 1818 (Annelida, Polychaeta): proposed use of plenary powers to designate a type species (A.I. Muir) 187
Rhodesiella plumigera (Loew, 1860) (Insecta, Diptera): proposed suppression by use of plenary powers (C.W. Sabrosky) 191

Elections made by the Section on Nomenclature of the Division of Zoology of IUBS at Helsinki, August 1979 195
Financial Support for the Commission 195
Comment on *Pleurocera* Rafinesque, 1818: proposed designation of type species (John B. Burch) 196
Comment on Linnean species of CARABIDAE (M. Mroczkowski) 197
Comment on Elapid snake names (G.L. Underwood & A.F. Stimson; H.M. & R.B. Smith) 198
Comment on *Dicranodonta* Woods, 1899; proposed designation of type species (S.R.A. Kelly) 200
Comment on *Gnathodus* Pander, 1856; proposed designation of type species (F.H.T. Rhodes; Glen K. Merrill; David L. Clark) 201
Commission Minutes and Report
Minutes of special meeting at Stensoffa, Sweden, 15-18 August 1979 203
Minutes of general meeting at Helsinki, 20-24 August 1979 . . . 205

Report of Commission to Section on Zoological Nomenclature of Division of Zoology of IUBS, Helsinki 207
Changes in the International Code of Zoological Nomenclature adopted by Commission in V.P. (79)1 209
Major changes in Code recommended by special meeting of Commission to Section on Zoological Nomenclature 211
Matters referred by special session of Commission for discussion by Section on Zoological Nomenclature 221
Minutes of Section on Zoological Nomenclature 222
Ogygiocaris Angelin, 1854, and *Ogygites* Tromelin & Lebesconte, 1876 (Trilobita): proposed conservation (G. Henningsmoen, V. Jaanusson, I.W.B. Nye & C.J. Stubblefield) 226
Cophixalus Boettger, 1892 (Amphibia Salientia): proposed designation of type species (J.I. Menzies, M.J. Tyler & R.G. Zweifel) 231
Bellota Peckham & Peckham, 1892 (Araneae): proposed designation of type species (M.E. Galiano) 236
Simia leucophaea F. Cuvier, 1807 (Mammalia Primates): proposed conservation (C.P. Groves & P.H. Napier) 239
Hesperites Pompeckj, 1895 (Cephalopoda: Ammonoidea): withdrawal of proposal for suppression (Secretary) 240
International Trust for Zoological Nomenclature Financial Report and Accounts for 1978 241
Herrera's formulae are not names. Proposed Direction supplementary to Direction 32 (H.M. & R.B. Smith) 246
Barbus altianalis Boulenger, 1900, and *B. ruepelli* Boulenger, 1902 (Pisces): proposed conservation (G. McG. Reid) 249
Ceutorhynchus Germar, 1824, and *Rhinoncus* Schonherr, 1826 (Insecta Coleoptera): proposed conservation and designation of type species (H. Silfverberg) 252
Index to Authors 257
List of Decisions in this Volume 258
Names placed on the Official Lists and Indexes in Decisions published in volume 36 260
Index to Key Names 262
Corrigenda 268
Particulars of dates of publication of the several parts in which the present volume was published 268
Instructions to Binder 269

Volume 36, Part 1
pp. 1 - 64



ISSN 0007 - 5167
1st JULY 1979

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

CONTENTS

	Page
Notices prescribed by the International Congress of Zoology:	
1. Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the *Bulletin of Zoological Nomenclature* .	1
2. Notice of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases	1
3. List of new applications	2
Special Announcements: Financial Assistance: Staff	3

(Contents continued on page iii)

LONDON

International Trust for Zoological Nomenclature
c/o British Museum (Natural History)
Cromwell Road, London, SW7 5BD

Price £6.25

(All rights reserved)

MUS. COMP. ZOOL. HIST. 1979 LIBRARY

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

A. The Officers of the Commission

President: Dr. C.W. SABROSKY *(Systematic Entomology Lab., USDA c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.).*

Vice-President: Prof. Per BRINCK *(Ecology Building, University of Lund, S-223 62, Lund, Sweden).*

Secretary: Mr. R.V. MELVILLE *(British Museum (Natural History), Cromwell Road, London SW7 5BD).*

Assistant Secretary: Dr. I.W.B. NYE *(British Museum (Natural History), Cromwell Road, London SW7 5BD).*

B. The Members of the Commission

(Arranged in order of election or of most recent re-election)

Dr. Eugene EISENMANN *(American Museum of Natural History, New York, New York 10024, U.S.A.)* (30 January 1968) **Ornithology**

Mr. R.V. MELVILLE *(British Museum (Natural History), Cromwell Road, London SW7 5BD)* (30 January 1968) *(Secretary)* **Palaeontology**

Dr. Y.I. STAROBOGATOV *(Zoological Institute, Academy of Sciences, Leningrad B-164, U.S.S.R.)* (30 January 1968) **Mollusca, Crustacea**

Dr. F.M. BAYER *(U.S. National Museum, Washington, D.C. 20560, U.S.A.)* (20 February 1972) **Octocorallia; Systematics**

Prof. John O. CORLISS *(University of Maryland, College Park, Maryland 20742, U.S.A.)* (20 February 1972) **Protozoa; Systematics**

Prof. T. HABE *(National Science Museum, 3-23-1 Hyakunin-cho, Shinjuku-ku, Tokyo 160, Japan)* (20 February 1972) **Marine Biology**

Mr. David HEPPELL *(Department of Natural History, Royal Scottish Museum, Edinburgh EH1 1JF, Scotland)* (20 February 1972) *(Councillor)* **Mollusca**

Dr. I.W.B. NYE *(British Museum (Natural History), Cromwell Road, London SW7 5BD)* (20 February 1972) *(Assistant Secretary)* **Lepidoptera**

Prof. A. WILLINK *(Universidad Nacional de Tucumán, Instituto Miguel Lillo, Miguel Lillo 205, 4000 Tucumán, Argentina)* (20 February 1972) **Neotropical Hymenoptera**

Prof. Enrico TORTONESE *(Instituto Zooprofilattico, Lungo Bisagno Dalmazia 45A, 16141, Genova, Italy)* (30 September, 1972) **Pisces; Echinodermata**

Prof. Per BRINCK *(Ecology Building, University of Lund, S-223 62, Lund, Sweden)* (30 September 1972) *(Vice-President)* **Arthropoda; Ecology**

Prof. Dr. Raphael ALVARADO *(Departamento de Zoologia, Facultad de Ciencias, Universidad de Madrid, Madrid 3, Spain)* (30 September 1972) **Echinoidea; Asteroidea**

Prof. E. BINDER *(Muséum d'Histoire Naturelle, CH 1211 Geneva 6, Switzerland)* (30 September 1972) **Mollusca**

Prof. Harold E. VOKES *(University of Tulane, Department of Geology, New Orleans, Louisiana 70118, U.S.A.)* (30 September 1972) **Mollusca**

Dr. L.B. HOLTHUIS *(Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands)* (30 September 1972) *(Councillor)* **Crustacea**

Dr. G. BERNARDI *(Muséum National d'Histoire Naturelle, 45 bis rue de Buffon, 75005, Paris, France)* (30 September 1972) **Lepidoptera**

Dr. C. DUPUIS *(Muséum National d'Histoire Naturelle, 57 rue Cuvier, 75231, Paris, Cedex 05 France)* (30 September 1972) **Heteroptera**

Dr. M. MROCZKOWSKI *(Instytut Zoologiczny, Polska Akademia Nauk, Warsaw, Poland)* (14 March 1975) **Coleoptera**

Prof. H.E. WELCH *(Department of Zoology, University of Manitoba, Winnipeg, Manitoba, R3T 2N2 Canada)* (17 March 1976) **Nematoda**

Prof. Dr. Otto KRAUS *(Zoologisches Institut und Zoologisches Museum, 2000 Hamburg 13, Germany)* (29 September 1976) **Arachnida, Myriapoda**

Dr. W.D.L. RIDE *(Department of Science and the Environment Central Office, Scarborough House, Phillip, P.O. Box 449, Woden, A.C.T. 2606, Australia)* (29 September 1976) *(Councillor)* **Mammalia; Recent and Fossil**

Dr. Curtis W. SABROSKY *(Systematic Entomology Lab., USDA c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.)* (29 September 1976) *(President)* **Diptera**

Dr. H.G. COGGER *(Australian Museum, Sydney 2000, N.S.W. Australia)* (29 September 1976) **Reptilia; E D P Methods**

Prof. Dr. Gerhard HAHN *(Fachbereich Geowissenschaften, Universitätsgebiet Lahnberge, 3550 Marbug, BRD)* (27 December 1978) **Palaeontology**

Prof. Dr. O. HALVORSEN *(Institute of Biology and Geology, University of Tromsö, P.O. Box 790, N-9001 Tromsö, Norway)* (27 December 1978) **Parasitology**

Dr. V.A. TRJAPITZIN, *(Zoological Institute, Academy of Sciences, Leningrad B-164, USSR)* (27 December 1978) **Entomology**

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE

A. The Members of the Trust

Sir Peter E. Kent, F.R.S. *(Chairman)*
Dr. F.G.W. Jones *(Secretary and Managing Director)*
Prof. D. Curry, F.G.S.
Sir Arthur Drew, K.C.B.
Mon. J. Forest
Col. Francis J. Griffin, O.B.E.
Dr. R.H. Hedley
Dr. N.E. Hickin
Dr. L.B. Holthuis
Prof. Dr. O. Kraus
Prof. O.W. Richards, F.R.S.
Sir Eric Smith, F.R.S.
Mr. C.W. Wright, C.B.
Dr. G.F. deWitte

B. The Officers of the Trust

Mr. R.V. Melville, M.Sc. *(Scientific Controller)*
Mr. R.J.A. Lever *(Assistant Zoologist)*

CONTENTS
(continued from front cover)

Page

Comments

Attus audax Hentz, 1845 as type species of *Phidippus* Koch, 1846 (Aranea): rebuttal of objections to designation (G.B. Edwards & B. Cutler) .. 4
Comments on request for a declaration modifying Article 1 so as to exclude names proposed for domestic animals from zoological nomenclature (R.G. Van Gelder; C.P. Groves) 5

International Code of Zoological Nomenclature

Further proposed amendments to the International Code (The Secretary) 11
Comments by zoologists on the Draft Code (J.D. Holloway & G.S. Robinson; W.O. Cernohorsky) . 15
The case for multiple type specimens in parasitic protozoa (P.C.C. Garnham, R.S. Bray & R. Killick-Kendrick) . 17

Opinions

Opinion 1125. *Ceratophyllus soricis* Dale, 1878 (Insecta: Siphonaptera): designation of a neotype under the plenary powers 22
Opinion 1126. *Tanagra cyanea* Linnaeus, 1766 (Aves) conserved 24
Opinion 1127. *Planaria montenigrina* Mrazek, 1904 (Platyhelminthes) given nomenclatural precedence over *Phagocata cornuta* Shishkov, 1903 27

New and Revived Cases

Bucephalus Baer, 1827 and *B. polymorphus* Baer, 1827 (Trematoda): proposed use of the plenary powers to conserve these names in accordance with general use (B. Baturo) 30
Prohysteroceras Spath, 1921 and *Neokentroceras* Spath, 1921 (Cephalopoda, Ammonoidea): proposed designation of type species in conformity with established usage (C.W. Wright & M.R. Cooper) . 37
Tipula ferruginea Fabricius, 1805 (Diptera: TIPULIDAE): proposed conservation (G.W. Byers) 40

Page

Ochthera exsculpta Loew, 1862 (Insecta, Diptera, EPHYDRIDAE): request for invalidation of neotype and validation of a rediscovered holotype (P.J. Clausen) 42

Staphylinus fulgidus as the type species of several Staphylinid genera (Insecta, Coleoptera, STAPHYLINIDAE) (A. Smetana) 44

METRIDIIDAE Carlgren, 1893 (Anthozoa) and METRIDIIDAE Sars, 1902 (Copepoda): request for a ruling to eliminate the homonymy (D. Fautin Dunn & K. Hulsemann) 53

Gnathodus Pander, 1856 (Conodonta): proposed designation of a type species under the plenary powers (H. Richard Lane & W. Ziegler) .. 57

Report on the generic names *Eriophyes* Siebold, 1851, and *Phytoptus* Dujardin, 1851 (Acarina) (The Secretary) 63

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 36, part 1 (pp. 1 - 64) 1st July 1979

NOTICES

(a) *Date of commencement of voting.* In normal circumstances the Commission may start to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the plenary powers.* The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin* (those marked with an asterisk involve the application of Articles 23a-b and 79b):

(1) *Bucephalus* Baer, 1827, and *B. polymorphus* Baer, 1827 (Trematoda): proposed conservation. Z.N.(S.) 2251.

(2) *Prohysteroceras* Spath, 1921, and *Neokentroceras* Spath, 1921 (Ammonoidea): proposed designation of type species. Z.N.(S.) 2254.

(3) *Tipula ferruginea* Fabricius, 1805 (Diptera, TIPULIDAE): proposed conservation. Z.N.(S.) 2255.

(4) *"Staphylinus fulgidus"* as the type species of several nominal genera (Coleoptera, STAPHYLINIDAE). Z.N.(S.) 2221.

(5) METRIDIIDAE Carlgren, 1893 (Anthozoa) and METRIDIIDAE Sars, 1902 (Copepoda): proposals to remove the homonymy. Z.N.(S.) 2263.

(6) *Gnathodus* Pander, 1856 (Conodonta): proposed designation of type species. Z.N.(S.) 2279.

*(7) *Phytoptus avellanae* Nalepa, 1899 (Acarina): proposed suppression of unused senior synonyms. Z.N.(S.) 2044.

(c) *Receipt of new applications.* The following new applications have been received since the publication of vol. 35(4) on 31

May 1979. Those marked with an asterisk involve the application of Articles 23a-b and 79b.

(1) *Cophixalus* Boettger, 1892 (Amphibia Salientia): proposed designation of type species. Z.N.(S.) 2298 (J.I. Menzies, M.J. Tyler & R.G. Zweifel).

*(2) *Corisella* Lundblad, 1928 and *Krizousacorixa* Hungerford, 1931 (Heteroptera, CORIXIDAE): proposed conservation. Z.N.(S.) 2299 (A. Jansson).

*(3) *Terebratula triangulus* Valenciennes, 1819, *T. diphya* von Buch, 1834, and *T. catulloi* Pictet, 1867 (Brachiopoda, PYGOPIDAE): proposed conservation. Z.N.(S.) 2300 (F.A. Middlemiss).

(4) *Epistomaroides* Uchio, 1952 (Foraminifera): proposed validation. Z.N.(S.) 2301 (H.J. Hansen & F. Rögl).

(5) Species-group names for taxa differentiated by geographical criteria: proposed modification of Code. Z.N.(S.) 2302. (G. Bernardi & R.V. Melville).

*(6) *Simia leucophaea* F. Cuvier, 1807 (Mammalia, Primates): proposed conservation (see Opinion 935). Z.N.(S.) 2303 (C. Groves & P.H. Napier).

SPECIAL ANNOUNCEMENTS

FINANCIAL ASSISTANCE TO THE COMMISSION

Donations to the Trust under the IUBS formula have been received from Australia and the Republic of South Africa, and are gratefully acknowledged.

The Advisory Board for Research Councils (which is the body responsible for allocating funds from the U.K. Government's Science Budget) has generously granted £5 000 to the Trust for the financial year 1979-80, with a promise of similar sums in the two following years, on condition that the Commission takes steps to ensure its own long-term sources of finance. This grant comes via the Royal Society, which has offered help, through the U.K. delegation to IUBS, in securing long-term support.

The Trust, in gratefully acknowledging this generous assistance, has decided to spend the first year's grant mainly on salaries for part-time staff in the Commission's office, with provision also for the Secretary's expenses in attending Commission meetings. A motion connected with the long-term future will be presented to the General Assembly of IUBS at Helsinki in August 1979.

STAFF OF THE COMMISSION'S OFFICE

Mr R.J.A.W. Lever has joined the Secretariat of the Commission as an Assistant Zoologist on a part-time basis. Mr Lever also works for the Commonwealth Institute of Entomology compiling maps of the distribution of insect pests, and is well known for his work as an entomologist in developing countries.

REBUTTAL OF OBJECTIONS TO DESIGNATION OF *ATTUS AUDAX* HENTZ, 1845, AS TYPE SPECIES OF *PHIDIPPUS* KOCH, 1846 (ARANEA). Z.N.(S.) 1904

(see *Bull.* vol. 27: 103, 213)

(1) By G.B. Edwards *(Florida Department of Agriculture and Consumer Affairs, Bureau of Entomology, Gainesville, Florida 32602, U.S.A.)*

In *Bull. zool. Nom.* vol. 27: 213 J.A. Beatty and R. Leech objected to a petition by H.W. Levi & L. Pinter (*ibid.*: 103) to suppress *Salticus variegatus* Lucas, 1833 and to set aside its fixation as the type species of *Phidippus* Koch, 1846 in favour of *Attus audax* Hentz, 1845. I would like to give a point by point rebuttal of Beatty's objections (Leech's objection is the same as Beatty's objection C); each rebuttal is coded by the same letter as the objection to which it refers.

A. The objection is trivial. While *Phidippus audax* (Hentz) may not be the most common jumping spider in absolute numbers, it certainly is one of the most common on and about human dwellings, and without doubt ranks either first or second in absolute numbers among species of the genus *Phidippus* (based on museum collections).

B. Even though the petition by Levi & Pinter indicates that ecologists and textbook writers have been the primary users of the name *Phidippus audax*, this name has also been used in taxonomic works and checklists for the species in question much more often than has the name *P. variegatus* (which has been used usually for the species now known as *P. regius* C.L. Koch, as previously indicated by Levi & Pinter).

C. Since no type is available for either *Salticus variegatus* or *Attus audax*, the most logical procedure would be to choose the most stable name, rather than dig up a third name to add to the confusion. This is what Levi & Pinter have done: they chose to use the most stable name, *Phidippus audax*.

D. While at the time of writing (1971) this objection may have had some validity, it has no validity at present. There are more active taxonomists working primarily on the SALTICIDAE in the United States (six) than are working primarily on any other family of spiders in that country. Generic and even subfamilial relationships have become much more clear due to collaboration by these specialists. There is no disagreement as to the limits of the genus *Phidippus*. Most importantly, the name *Phidippus audax* (Hentz) has been the only name used for the species in question since the original petition in 1970, including its use in several internationally distributed handbooks to spiders by the noted spider authorities B.J. Kaston and H.W. Levi.

It is now time for the reconsideration recommended by Beatty; I am presently revising the genus *Phidippus* and I am fully in support of the merits of nomenclatural stability provided by the Levi & Pinter petition.

(2) By Bruce Cutler *(1747 Eustis Street, St. Paul, Minnesota 55113, USA)*

In 1970 I wrote to the Commission to support the petition by Levi & Pinter to conserve *Attus audax* Hentz, and I continue to support it. Dr

Edwards has adequately rebutted the objections by Beatty & Leech. An additional factor is the paper by Taylor, B.B. & Peck, W.B., *J. Arachnol.*, vol. 2: 89–99, 1975, which reports successful interbreeding between northern and southern forms of that species. In addition to the confusion with *Phidippus regius* C.L. Koch mentioned by Edwards, and by Levi & Pinter in their original petition, the southern forms had been considered as belonging to *P. variegatus*, while northern specimens were considered as *P. audax*. The interbreeding demonstrates that one biological species is involved. The overwhelming preponderance of usage favours the name *Phidippus audax* (Hentz) for this taxon.

COMMENTS ON REQUEST FOR A DECLARATION MODIFYING ARTICLE 1 SO AS TO EXCLUDE NAMES PROPOSED FOR DOMESTIC ANIMALS FROM ZOOLOGICAL NOMENCLATURE. Z.N.(S.) 1935

(see vol. 27: 269–272; vol. 28: 77–78, 140; vol. 29: 108; vol. 34: 137–140)

(1) By Richard G. Van Gelder *(American Museum of Natural History, Central Park West at 79th St, New York, N.Y. 10024, USA)*

Groves (1971, 1977) has suggested that the International Code of Zoological Nomenclature be modified to exclude names proposed for domestic animals from zoological nomenclature. Should the Commission choose to modify the Code as he suggests, far more disruption to zoological nomenclature will occur than currently exists. I do not find the present situation as deplorable as does Groves.

Groves' main premise seems to be that domestic animals are not subspecies because they have evolved 'artificially' rather than 'in nature', that they do not have discrete geographic distribution comparable to 'wild' subspecies, and that their existence as discrete entities is dependant upon human protection. He concludes that if a specific epithet is based upon a domestic animal, then a trinomen for a wild subspecies cannot nor should not be included under the specific name that originated from a domestic animal.

Equus caballus Linnaeus is the commonly accepted name for the domestic horse, and *Equus caballus caballus* is the trinominal generally accepted and used for all breeds of domestic horses. Groves would find unacceptable the use of *Equus caballus przewalskii* for the wild Mongolian horse, a commonly-accepted trinominal that indicates conspecificity between the wild and domestic forms. He presumably would prefer to remove *E. caballus* from zoological nomenclature, and thereby indicate the wild horse of Mongolia as *Equus ferus przewalskii*. *(Equus ferus ferus* Boddaert, 1785, the tarpan, would be the nominate race and one of the races from which *E.*

caballus Linnaeus may have been domesticated.) Inasmuch as Groves has indicated that he would not include some feral animals – ones that were domestic but which escaped into the wild and are now largely free-living – in his consideration of domestic animals, one wonders what name he would suggest for the free-living horses of the American West. They could not be called *E. ferus caballus* because the subspecific name would have been excluded from zoological nomenclature and, further, such a combination would be contrary to the existing Code (*caballus* dates from Linnaeus, 1758; *ferus* from Boddaert, 1785). Further, in this case, the type species of the genus *Equus* is *E. caballus* Linnaeus, and the family-name EQUIDAE is likewise based on *Equus*, type species *E. caballus* Linnaeus. This example is paralleled by other similar situations that involve the generic names *Capra* Linnaeus, type *Capra hircus* Linnaeus; *Bos* Linnaeus, type *Bos taurus* Linnaeus; *Camelus* Linnaeus, type *Camelus bactrianus* Linnaeus; *Ovis* Linnaeus, type *Ovis aries* Linnaeus; *Felis* Linnaeus, type *Felis catus* Linnaeus; and *Canis* Linnaeus, type *Canis familiaris* Linnaeus, each of which is based, at least in part, on a domestic form, and each of which also serves as a basis for a family-level name as well. Other examples such as *Bubalus bubalis* (Linnaeus), *Lama glama* (Linnaeus), *Rangifer tarandus* (Linnaeus), *Equus asinus* Linnaeus, *Elephas maximus* Linnaeus, and *Bos grunniens* Linnaeus, 1766, are among those that would be affected should Groves' proposal be implemented.

Groves (1977) seems bothered by what he construes as an ancestor-descendant relationship implied by nomenclature when the name for the domestic form antedates the wild one. Although he does not state this outright his example for the cat suggests his upset at the idea (his) that the name combination *Felis catus silvestris* for the wild cat implies an evolutionary relationship of the wild *(silvestris)* from the domestic *(catus)*. Zoological nomenclature does not imply, suggest, nor concern itself with such relationships.

Groves indicates that many of Linnaeus's taxa that include domestic animals are based solely on domestic forms. This is not so. As Eisenmann (1972) has indicated for *Fringilla canaria*, both the wild and the domestic animals were included by Linnaeus. The same is true for a number of the Linnaean mammals, in which the diagnosis is generally equally applicable to both the wild and the domestic forms, and for which the provenance ("habitat") is given either as a place other than in direct association with human beings or association with human beings is specified, or both. For example, Linnaeus gives: for *Equus asinus "Habitat in* oriente"; for *Bos* (=*Bubalus* Smith, 1827) *bubalis, "Habitat in* Asia, *cultus in* Italia"; *Bos taurus*, the habitat is "Poloniae" (where the wild aurochs or urus persisted until some 30 years earlier); *Capra hircus* for which Ellerman & Morrison-Scott (1951) state was "the domestic Goat of Sweden", the habitat was given as "montosis ...", while for *Felis catus* it is given as "Europae australis-sylvis". Not only are the Linnaean diagnoses applicable both to wild and domestic animals in these instances, but it seems clear from the other material included by him that it was his intent to consider them both under the same (specific) epithet. Many of these names were subsequently restricted to the domestic form, in accordance with Recommendation 69B (1) of the Code.

Groves proposes to modify Article 1 by inserting "domestic animals" in the line that excludes names given to teratological specimens and to hybrids. In part, this section of the Code implies an intention to exclude the application of

zoological nomenclature to deviant individuals rather than to populations. A major problem that would arise in Groves's proposal is the critical one of defining "domestic animal". As Melville (1977) has indicated, standard dictionary definitions are imprecise for nomenclatural or biological purposes. He proposed as a definition, "Any animal of which the living conditions and breeding are controlled by man for his use or pleasure, other than individuals taken in the wild for purposes of conservation or research and their progeny." By this definition, many of the animals in parks and reserves in which there is selective culling and other modification of breeding by human beings would be construed as "domestic".

It seems appropriate to distinguish two aspects of the problem of domestication: 1) the taming of individuals and 2) the selective development of groups or populations of animals. Thus, I would distinguish between domestic animals (a population) and domesticated animals (individuals). In this sense, *individuals* of any species presumably can be domesticated – *i.e.* made tractable or tame, and therefore 'of the home'. On the other hand, domestic animals are *populations* that, through *direct* selection by man, have certain inherent morphological, physiological, or behavioral characteristics by which they differ from their ancestral stocks (Van Gelder, 1969). Although this definition has some shortcomings, it contains the essential elements that the selection by man was direct, that the breeding was purposeful. It also indicates that domestic animals are populations, rather than tame individuals, of animals with human-selected characteristics. By these definitions, the Asiatic elephants (*Elephas maximus* Linnaeus) used as work animals would be domesticated, but not domestic animals. They have not been selectively bred by man, but have been captured in the wild and tamed (domesticated). What little breeding has been accomplished has not involved intentional selection, but has been fortuitous. Similarly, until recently when artificial insemination of honey bees (*Aphis mellifera* Linnaeus) was accomplished, these insects were domesticated rather than domestic.

Under the existing Code, the names of domestic animals are available. To implement Groves's proposal would require, under Article 23c(iii), replacement with the next oldest available name. This would not only upset the existing nomenclature of a number of species but would also require reallocation of the type species of a number of genera including *Canis, Felis, Bos, Equus, Camelus, Capra,* and *Ovis,* among others. Groves's final suggestions, to treat domestic forms as hypothetical concepts or as probable hybrids lacks merit. Domestic animals exist as identifiable genetic populations, and the concept of domestication is far from hypothetical. The definition of a hybrid, according to the amended glossary of the Code, is "The product of the crossing of two species." Although Groves cites a possible formation of a domestic animal, the alpaca, from a hybridization between two wild species, for the most part he confuses the influx of genes of wild subspecies into domestic animals, rather than from wild species, as hybridization. This is not hybridization under the Code glossary definition. Not only have many of the type species involved in this matter been put on the Official List of accepted names, but the designation of subsequent type species (Recommendation 69B (1)) states "In the case of Linnean genera he should designate the most common species or one of medical importance ..." The examples given as preferred include *"Bos taurus, Equus caballus, Ovis aries, ..."*

To remove the names of domestic animals from zoological nomenclature seems contrary to the sense of the system of nomenclature itself – that of providing zoologists with a precise and universal designation and language. The para-nomenclature that Groves suggests as an alternative does not add anything that is not encompassed in the existing system, and reduces both precision and universality, as well as removing these animals from usual zoological consideration. Domestic animals are derived from existing or extinct species whose names are encompassed in a formal system of nomenclature. Although the Code is not concerned with the biology of these domestic animals, their exclusion as nomenclatural entities somehow also deprives practising zoologists of the nomenclatural link, and thereby the biological link, that domestic animals truly have to wild species.

I do think that a proliferation of names, primarily trinominals, for breeds of domestic animals would not serve a useful purpose, and fortunately, this has not been the case. However, I do believe that an available zoological name indicating that the animals in question are domestic populations serves a useful purpose. Whether or not the specific epithet for the domestic taxon was based on the domestic animal or the wild species is irrelevant, and the use, for example, of *Capra hircus aegagrus* for the wild goat, even though the specific epithet *hircus* is presumed to have been based on the domestic form, is widespread and seems not to discommode anyone. Similarly, the trinomen *Bos taurus primigenius* for the wild aurochs, and *Equus caballus przewalskii* for the Mongolian wild horse, and *Camelus bactrianus ferus* for the wild Bactrian camel are widespread, convenient, and not misunderstood.

I agree that a proliferation of names, specific or subspecific, based on domestic variants would be uncalled for. To this end, I think it appropriate for the Commission to recommend that, in taxa with domestic forms, only one name be permitted to designate the domesticate. If wild and domestic forms are considered conspecific, as most are, then the earliest name under the Law of Priority should hold. In cases in which the species name is based on a domestic animal, then the tautonym would serve as the trinominal for the domesticate.

To summarize: Groves's proposals for the exclusion of names based on domestic animals from zoological nomenclature would create more problems than they would presumably solve. The arguments that domestic animals are hypothetical concepts or hybrids (between species) are false, and his desire to eliminate them on the grounds that they do not fill his criteria for subspecies is not within the area of concern of the Commission. I have suggested that the Commission recommend that only one name within a species be permitted to represent all domestic forms of that taxon, which would avoid a proliferation of names based on domesticates in different regions.

REFERENCES CITED

EISENMANN, E. 1972. Comments on proposal to exclude from zoological nomenclature names for domestic animals. *Bull. Zool. Nom.*, vol. 29: 108.

ELLERMAN, J.R. & MORRISON-SCOTT, T.C.S. 1951. *Checklist of palaearctic and Indian mammals.* British Museum Trustees, 810 pp.

GROVES, C.P. 1971. Request for a declaration modifying Article I so as to exclude names proposed for domestic animals from zoological nomenclature. *Bull. Zool. Nom.*, vol. 27: 269–272.

——— 1977. Comments on request for a declaration modifying Article I so as to exclude names proposed for domesticated animals from zoological nomenclature. *Bull. Zool. Nom.*, vol. 34: 137–139.

MELVILLE, R.V. 1977. Comments on request for a declaration modifying Article I so as to exclude names proposed for domesticated animals from zoological nomenclature. *Bull. Zool. Nom.*, vol. 34: 139–140.

VAN GELDER, R.G. 1969. *Biology of mammals.* Charles Scribner's Sons, New York, 197 pp.

(2) Reply by Colin P. Groves

As Dr Van Gelder has been kind enough to send me a copy of his comment, I should like to reply here and now.

As has been pointed out by Erna Mohr (*Das Urwildpferd,* 1959: 6), there is no such name as *Equus ferus* Pallas. As she notes – but, curiously, does not act upon – there is an *Equus ferus* Boddaert, 1785: 159. This name, which is available and clearly refers to Gmelin's tarpan, would be the earliest available name for a wild horse. This is just a minor point, to correct a factual error.

The matter of Linnaeus's names is not directly relevant: as Van Gelder himself notes, most of the Linnean names have been restricted by subsequent usage to the domestic forms in question. Linnaeus himself seems to have been unclear in many cases whether a given species was domestic or not; for example, Llama, Alpaca and Dromedary, all of them unknown in the wild state, are given "Habitat" entries with no indication that the habitats are in fact locales of domestic occurrence. So that in other cases, such as Goat, Sheep and Horse, which could have been based on both wild and domestic forms, no indication is given of which is meant: *Ovis aries "habitat in siccis apricis calidis"* (dry, sunny, warm areas); *Capra hircus "habitat in montosis"* (mountainous regions); and *Equus caballus "habitat in Europa",* all of these designations being as much applicable to the domestic as to the wild forms. *Equus asinus,* on the other hand, is stated to be found in both wild and domestic states, but the wild form is the Onager, a different species: if the Linnean name were validated for the wild species in this case, oh confusion! *Bos bubalis* is, as Van Gelder notes, distinguished as to wild and domestic forms; so is *Bos taurus,* which is not mentioned by Van Gelder – the full extent of the habitat entry reads *"Habitat in Poloniae depressis graminosis ferus Urus"* (the wild Urus inhabits low-lying grassy areas in Poland).

Reading my paragraph on the Cat again and again, I cannot see how Van Gelder reads into it that I am "bothered by what (I) construe as an ancestor-descendant relationship implied by the nomenclature when the name for the domestic form antedates the wild one". I am well aware that no such phyletic relationship is implied by nomenclatural priority.

Naturally there are considerable difficulties, most familiar to the

archaeologist, in deciding what is and what is not domestic, in borderline cases. For the major domesticates, based on Linnean nomenclature for the most part, there is no doubt, however. Of the species listed by Van Gelder, only in the case of the Reindeer is there any difficulty; the Asian Elephant is not domestic at all, and the various bovines, camelids, etc., are frankly domestic.

The nature of domestication: "domestic animals exist as identifiable genetic populations, and the concept of domestication is far from hypothetical". There are two separate points here:

(a) It is not the concept of domestication that I characterise as hypothetical, but the concept of a domestic species or subspecies;

(b) Domestic species (or subspecies) are surely not identifiable genetic populations. Every gradation exists, from two breeds that are kept deliberately reproductively isolated, in a situation that mimics that of two wild species, via breeds that are allowed to mingle, to breeds that are continuous with the wild populations of the region concerned. In the first instance there are not one but many genetic populations; in the third case there is no separate genetic population at all; only the second case answers to Van Gelder's characterization.

Polyphyletic ancestry: Far from calling the Mongolian wild horse *Equus caballus przewalskii,* the rejection of this nomenclature is almost the only point of agreement among hippologists who are otherwise locked in bitter polemic. What if someone of the polyphyletic school, such as Ebhardt, were right, that domestic horses derive from about four wild species? How would we then refer to the domestic horse nomenclaturally? How are we to refer to the Alpaca, which I noted in my previous comment in this *Bulletin* has been shown by Hemmer to be derived with high probability from two wild ancestors?

In the case of domestic cattle, how are we to apply the "one name permitted to designate the domesticate principle?" Authors using zoological nomenclature for domesticates commonly refer to the Zebu breeds as *Bos indicus:* what, here, is "the domesticate?" The domestic ox as a whole? – in which case the Zebus would become *Bos taurus taurus,* despite the fact that the Zebu and Humpless cattle are almost certainly derived from different subspecies of *Bos primigenius.* Diphyletic taxa are surely not consistent with good taxonomic practice.

The strongest argument, to my mind, for excluding domestic animals from nomenclature is quite simply that all specialists concerned with domesticable species – whether cat, dog, cattle, buffalo, horses, asses, camelids or pigs – have with one accord rejected the International Code of Zoological Nomenclature as being inapplicable to them. Such an *ad hoc* solution as *Bos primigenius* f. *taurus,* or *Lama guanicoe* f. *glama,* in which priority goes to the wall, is understandable in the circumstances but cannot be allowed to persist. This really is the reason why something must be done about it by the Commission. Whether the Linnean names are banned, or made by fiat to refer to wild forms, or whatever solution is adopted, is of less importance to me than that something be done to regularise the situation so that we do not have to cope any more with the trauma of battering the square pegs that are domestic animals in the round holes of zoological nomenclature into which they will not fit. It is probably no accident that it is a topic such as this that calls forth such an excruciating cliché.

FURTHER PROPOSED AMENDMENTS TO THE INTERNATIONAL CODE OF ZOOLOGICAL NOMENCLATURE Z.N.(G.) 182

By the Secretary, International Commission on Zoological Nomenclature

In July 1978 the Editorial Committee of the Commission met in London for a week's consideration of a number of general matters of principle affecting the Code. Four main topics were discussed:

1. Status of names on the Official List
2. Paranomenclature
3. Report of the committee on the typification of species of protozoa
4. "Type of a name" versus "type of a nominal taxon"

2. On the first and fourth topics, it was agreed that debates should be initiated in the *Bulletin*, and this was done (see vol. 35: 151–155, 156–167). On the third topic, the Committee's report (see vol. 35: 200–208) was discussed and their detailed proposals approved. Comments from zoologists on these topics are awaited. The second topic was discussed at length and agreed proposals were drafted for substantive changes in the Code. These are presented here.

PARANOMENCLATURE

3. Paranomenclature is the nomenclature of parataxa. Parataxa are fossil fragments or detached organs that can be classified in genera and species that do not coincide with the genera and species of the more complete fossils to which they belong. In the groups concerned, therefore, a dual nomenclature exists, contrary to Article 24 of the Code. It contributes nothing to say that Article 24 must be applied so that the Law of Priority will determine whether the name of the first-named fragment will become the name of the more complete fossil, or *vice versa*, depending on the individual case. These dual nomenclatures reflect dual taxonomies and they exist to meet a real need among palaeontologists. It is therefore incumbent on the Commission to find a way of adapting the Code to fit that need.

4. The question of whether the Code should or should not regulate the names of parataxa was exhaustively discussed in the

papers prepared for the London (1958) International Congress of Zoology (see *Bull. zool. Nom.* vol. 15: 5–120, 158–184, 216–246, 296–314, 345–350, 686–690, 705–728, 759–761, 826–851, 968–973, 1241). The Colloquium preceding the Congress decided to defer consideration of the question, which was eventually entrusted to a committee with instructions to report to the Washington (1963) Congress. The report recommended that no further consideration be given to the problem of parataxa, and the matter was accordingly dropped. It may be thought that the matter was over inflated at London, and that Washington went to the other extreme.

5. If it is true that the Code does not limit the freedom of taxonomic thought and action, then it cannot deny palaeontologists the right to classify fossil fragments in a different pattern from more complete fossils if, by so doing, they get and transmit a fuller understanding of the animals in question and make a richer contribution to geology. Furthermore, to apply Article 24b(i) strictly to discrete conodonts and conodont assemblages; to aptychi and ammonite phragmocones; to nautiloid jaws and nautiloid phragmocones; would introduce intolerable chaos into fields already producing a rich enough harvest of difficulties.

6. A different problem in paranomenclature is presented by the names of trace fossils. These are indisputably signs of the work of animals, yet Articles 16a(viii) and 24b(iii) reduce their nomenclature to chaos in a quite irrational manner: these provisions allow, in the former case, availability, and in the latter, validity, to names based on the work of animals if they were published before 1931, but not if they were published after 1930. Yet the most exciting developments in ichnology and ichnotaxonomy have taken place in the last thirty years. The failure of the zoological Code to provide for the nomenclature of ichnotaxa has caused resentment to the point where a draft code has been published especially for them (Sarjeant, W.A.S. & Kennedy, W.J., 1973, *Canadian J. Earth Sci.* vol. 10: 460–475). Unfortunately, that draft is modelled closely on the Botanical Code and introduces into the Animal Kingdom a number of nomenclatural principles that are foreign to our Code. Such an introduction would not contribute towards clarity and uniformity of nomenclature in the Animal Kingdom. However, Sarjeant & Kennedy state clearly the two chief problems of trace-fossil nomenclature: one is that a single animal may produce a variety of structures, to which different names have been given; the other is, as with parataxa, the confusion caused by applying the Law of Priority [Article 24b(iii)] to the names of trace-fossils and to their causative organisms, when these are known.

7. The paradox becomes even more acute when it is found that the Code does, after all, admit a sort of paranomenclature, in dealing with collective groups, which are, in origin, larval stages of helminth worms that cannot be allocated to the same genera and species as the adult worms. Their names are treated in all respects as generic names, but collective groups require no type species. Here, then, is a licensed dual nomenclature for different stages in the life cycle of the same creatures.

8. It appears on examination that the logic of collective-group nomenclature has never been carefully thought out. At least some of the names now used for collective groups were first proposed as *bona fide* generic names and have come to be used as collective-group names by accretion of usage, though not in accord with any taxonomic logic. *Cercaria* Müller, 1773, and *Bucephalus* Baer, 1827, both proposed as *bona fide* generic names, are both based on the larval cercaria stage of helminth worms; *Cercaria* has become a collective-group name, applied only to unallocated cercariae; *Bucephalus* is still used as a generic name because the life cycle of its type species, *B. polymorphus* Baer, has been fully worked out. The use of that binomen for the adult worm, however, is weakly founded in logic, for the type specimen of *B. polymorphus* must be a cercaria which it is not possible to allocate, of itself, to an adult species. Indeed, the logical relationship between a cercarian "species", which cannot perpetuate itself directly as a natural population by either sexual or asexual reproduction, and a species that can perpetuate itself may well be open to question.

9. The Editorial Committee had to address itself to the practical rather than the philosophical aspects of these problems. It was greatly helped in this by a lucid exposition prepared by Mr Heppell, who, though not a member of the committee, was invited to take part in its work for that occasion. It was decided to consider separately those entities whose taxa at the genus-group level do not require type species and those whose taxa at that level do require type species. Trace fossils (ichnotaxa) were placed with collective groups in the former category, and parataxa in the other. It was not found necessary to compose an entire new Code for either. More economical, if more subtle solutions were sought by proposing the following additions to the 6th draft of the third edition of the Code:

Article 1a, reorganise from line 3 onwards, as follows: "... living or extinct, including names based on the work of animals, names for fossils that are substitutions (replacements, impressions, moulds and casts) for the actual remains of animals, and names for fossil ichnotaxa and parataxa. The Code is concerned ..."

Article 1b, insert a new clause "(8) for traces of living animals" and renumber existing (8) as (9).

Article 2, add a new Section "(c) *Names for fossil ichnotaxa.* Names proposed for fossil ichnotaxa at any taxonomic level covered by the Code are eligible for use in zoological nomenclature provided that they satisfy the relevant provisions of Chapter IV, but they do not compete in priority with names given to causative organisms and the provisions of Article 13b do not apply to them."

Article 2, add a new Section "(d) *Names for fossil parataxa.* Names proposed for fossil parataxa are eligible for use in zoological nomenclature provided that they satisfy the relevant provisions of Chapter IV, but they do not compete in priority with names given to whole animals. Discrete fossil parts that can be arranged in the same taxa as whole animals at family-group and species-group levels but not at genus-group level may be treated as collective groups [Art. 42b(i)]."

Article 10, insert a new Section "(e) *Names for ichnotaxa and parataxa.* Names proposed for fossil ichnotaxa and parataxa are to be treated as family-group, genus-group, or species-group names, according to the way in which they were first established." The existing sections e, f and g become sections f, g and h.

Article 66, add a new clause "(i) If a type species has been fixed for a collective group, it is to be disregarded."

7. The following additions are proposed for the Glossary:

"*ichnotaxon, n.* The fossil work or trace of an animal (but not a secretion) which cannot be, or has not yet been, related to the genus or species of causative organism (see Article 2c)."

"*parataxon, n.* A taxon based on a fragment or detached organ of an animal which can be classified at genus-group and species-group levels by comparison with other fragments or detached organs, but which cannot be assigned to the same taxa at those levels as the whole animals to which they belong."

8. Comments on these proposals are invited from zoologists in general, and palaeontologists in particular. There is one obvious point that cries out for clarification. It is perfectly well known that no fossil is a complete animal. The conflict in priority where the names of parataxa are concerned is, therefore, not between names for parts and names for whole animals in the strict sense of Article 24b(i), but between names for smaller and larger parts – or between names for small parts and more nearly complete animals. How is this to be expressed in the Code?

9. It should also be noted that the proposals for ichnotaxa concern fossil traces only. Traces of living animals can always be related to their causative organism, and there is no need to name them separately.

COMMENTS BY ZOOLOGISTS ON THE DRAFT CODE Z.N.(S.) 2250

(1) *Comment on Draft Article 58,* by J.D. Holloway and G.S. Robinson *(Commonwealth Institute of Entomology, and British Museum (Natural History), London SW7 5BD)*

Kudrna (1978, *Bull. zool. Nom.,* vol. 35: 82) has drawn attention to the fact that etymological expertise is needed in order to interpret Article 58 of the Code. We agree that the need for etymological expertise in the interpretation of the Code should be eliminated wherever possible. Mr Kudrna's proposal attempts to deal with confusion arising from interpretation of the phrase 'of the same origin and meaning' by removing this phrase altogether. However, this proposal is not in the interests of stability as it will increase the number of species-group names deemed to be junior primary homonyms. These would require replacement even though they are not currently considered to be congeneric and are not liable to cause any confusion. This situation will be aggravated whenever additions are made to the 'single-letter differences' listed in Article 58.

2. An example of the potential effect on stability of Mr Kudrna's proposal may be found in the case of *Papilio aristeus* Stoll 1780, and a possible junior primary homonym, *Papilio (Satyrus) aristaeus* Bonelli, 1826. These species-group names are of different origin and meaning as shown by Tremewan (1978, *Entomologist's Gaz.,* vol. 29: 70–73), but were treated as homonymous by Kudrna (1977, *A revision of the genus* Hipparchia *Fabricius,* (Classey, Faringdon), 300 pp.). The name *Hipparchia aristaeus* (Bonelli) has had extensive use and is found widely in popular reference literature on European butterflies. *Papilio aristeus* Stoll is a Moluccan species now placed in the genus *Graphium* Scopoli (PAPILIONIDAE). The Code as it now stands permits retention of the name *aristaeus* and thus contributes to stability. Mr Kudrna's proposal would lead to *aristaeus* being replaced.

3. There is, however, an alternative solution to the etymological problem. We suggest that, as in the case of genus-group names, even a one-letter difference in spelling (such as those listed in Article 58) is sufficient to differentiate a species-group name for the purposes of primary homonymy. Confusion of the user of nomenclature by such small spelling differences arises only when such species-group names come together in current generic combinations.

4. We therefore propose that the first paragraph of Article 58 be redrafted as follows:

> 'Minor variant spellings deemed to be homoyms. – When species-group names that differ in spelling in any of the following respects are treated as congeneric, they are deemed to be secondary homonyms.'

5. This proposal is supported by B.L. d'Abrera, D.S. Fletcher, S.H. Halsey, W.G. Tremewan, P.E.S. Whalley and E.P. Wiltshire. The following supported Mr Kudrna's original proposal but on reflection consider the above proposal to be a better solution to the problem: P. Ackery, J.D. Bradley, D.J. Carter, A.H. Hayes, I.W.B. Nye, A.D. Palmer, R.D. Pope, M. Shaffer, R. Smiles, R.I. Vane-Wright, A. Watson.

AUTHORS' NOTE

In circulating this proposal among colleagues, we encountered a variety of opinions. Some felt we should have gone further and sought to remove Article 58 altogether, or sought to restrict homonymy purely to names in current combinations, i.e. secondary homonymy. Others felt that it would be unwise to separate the concepts of primary and secondary homonymy in the manner we suggest or pointed out that our proposal might create problems with regard to homonymy involving diacritic marks or Article 30. Problems were also envisaged where primary homonyms have already been established under Article 58 but would be revoked by acceptance of our proposal.

The acceptance or rejection of any proposal for changes to Article 58 may turn on the relative proportions of

(a) primary homonyms already established under Article 58;
(b) the likely number of such still to be discovered; and
(c) the proportion of (a) and (b) in current combinations.

A case can be made for retaining the Code as it stands in the hope that the phrase 'of the same origin and meaning' will provide a loophole whereby, when the etymological situation is unclear, a taxonomist can arbitrate in the interests of stability. We therefore submit our proposal to the Commission to ensure that all alternatives are considered along with that of Mr Kudrna as it is evident that most of the signatories to his proposal have had second thoughts about it.

(2) *Comment on Draft Article 10e, Names for primary divisions of genera.* By W.O. Cernohorsky *(Auckland Institute and Museum, Auckland, New Zealand)*

I am particularly concerned with the proposal in *Bull. zool. Nom.* vol. 35: 78 on the interpretation of Draft Article 10e, 'Names for primary divisions of genera'.

2. I would say that about 20 per cent of all molluscan generic names were proposed as secondary and tertiary divisions of genera, and such genus-group names, provided at least one nominal species-group taxon was associated with them, have always been considered by malacologists as validly established, provided that the genus-group name was properly latinised and met other requirements of availability. One could cite as a typical example Thiele's *Handbuch der systematischen Weichtierkunde,* 1929–1935, where the author recognises genera, subgenera and sections. Numerous new genus-group names have been proposed as 'sections' in this work, for instance:

: 324: Section *Proneritula* n. sect. Type species, by monotypy, *N. (P.) westerlundi* (Brusina)

: 333: Section *Olivellopsis* n. sect. Type species, by monotypy, *B. (O.) simplex* (Pease)

and there are many others.

3. Needless to say, if the word 'primary' were retained and strictly interpreted, the effect on molluscan nomenclature would be not merely disturbing, it would produce chaos. It should also be made clear that such a name, if meeting the other requirements for availability, and whether proposed generically, subgenerically or infrasubgenerically, for one or more species (the proposal mentions only 'a group of species') should be considered valid.

THE CASE FOR MULTIPLE TYPE SPECIMENS IN PARASITIC PROTOZOA. Z.N.(G.) 185

By P.C.C. Garnham, R.S. Bray and R. Killick-Kendrick *(Imperial College Field Station, Ashurst Lodge, Ascot, Berks SL5 7DE, U.K.)*

For the past seven years or more, protozoologists have expressed a desire for a change in the Code in special connection with Articles 72–74. The present situation is that it is practically

impossible to designate a single individual as the type of a species, particularly in the Class formerly known as the Sporozoa and now termed Apicomplexa (Levine, 1970). This group includes the economically and medically important malaria parasites, coccidia and piroplasms.

2. Accordingly, in 1977, the International Commission on Protozoology, during the V International Congress of Protozoology in New York, appointed a committee to consider the question and propose amendments to the Code. The report of this committee was approved by the International Congress of Parasitology in Warsaw in September 1978 and is published in *Bull. zool. Nom.* vol. 35: 200–208.

3. There is little doubt that the unsuitability of Chapter XVI of the Code has been responsible for the reluctance of most protozoologists to deposit type specimens in museum collections (Garnham, 1977). There exists a very special need for a base line from which to compare species and subspecies, and a single individual or even a clone of a number of individuals on a slide is often insufficient for the identification of the species. The suggested changes in the Code do not imply that the types of all new species of protozoa must be multiple (hapantotypes); but in species with complicated life cycles, the essential criteria for identification are in many cases multiple and only to be seen in preparations showing different stages – which, however, must be directly related. It is only the combination of characters that enables a species to be defined and firm identifications to be made. It is seldom that a single individual will suffice in the Apicomplexa.

4. In most cases, it is necessary to have several directly related stages before a type can be designated. In the genus *Plasmodium* it is impossible to construct a running synoptic key and instead, as in botany, a tabular key is necessary where, for example, given 12 features, one species possesses five and another seven, but the two that differ are shared by a third species with nine of the features but lacking a feature common to the first two species. Here a multiple type specimen is necessary.

5. Few type specimens have been designated in the past, and so little original material exists that neohapantotypes are necessary for most of the organisms. There seems no reason why the neohapantotype should not include characters not noted by the original observer, but that became obvious later when the multiple stages of the life cycle had been worked out.

6. In the groups with which we are here concerned, there must be many hundreds of species for which types should be deposited, so that comparisons are possible and exact identifica-

tions can be made. The *material itself* is necessary; the *original description* alone may be inadequate: a feature subsequently recognised as having critical importance may have been overlooked. If the original type slide is available, a comparison can be made. For example, when Schwetz described *Plasmodium fallax* in 1930, he made no mention of vacuoles. These were subsequently found to be characteristic of the species and enabled *P. gundersi* to be differentiated from it; in all other respects the two species are identical (Bray, 1962). If the description alone had been available, it would have been impossible to make the distinction. Fortunately, in this case Schwetz's original material was extant. This is an instance where a single, suitably chosen preparation might well serve the function of a type.

7. There are very many examples of species that need a combination of characters of different stages for their identification. Five are given below:

(1) *Plasmodium ovale* Stephens, 1910, and *P. vivax* (Grassi & Felletti, 1890): The blood stages of these two parasites may look the same, and for 20 years Wenyon refused to accept the validity of the former; then in 1932 James and others demonstrated a characteristic difference in the morphology of the respective oocysts in the mosquito host (a different type of pigment distribution) and later still (Garnham and others, 1955) the exoerythrocytic stages in the parenchyma cells of the liver of man were also found to be different. However, neither the mosquito stages nor the liver stages alone would be sufficient for identification, for other parasites show similar features, although in them the blood stages differ.

(2) The identification of the rodent malaria parasites depends very much on a comparison of the features in the exoerythrocytic and sporogonic stages; the blood forms may be identical. For example, the blood forms of *P. berghei* and *P. yoelii* are indistinguishable, but the species can be recognised by the length of the sporozoites (Killick-Kendrick, 1974). But a sporozoite alone cannot satisfactorily be used as a type specimen because it could not be distinguished from a sporozoite of many other species of malaria parasites. The sporozoite only has value if it has been shown to have arisen from a parasite with the characteristics of the *berghei* group. The separate identities of *P. berghei* and *P. yoelii* are now generally accepted not solely on the length of the

sporozoites, but also on the rate of growth and morphology of the exoerythrocytic schizonts, and the size of the mature oocyst. Marked differences in isoenzymes (Beale and others, 1978) offer another critical feature for differentiating these two species and others in the *berghei* species-complex.

(3) Subspecific differences are often only revealed by observing the complete life cycle. *Plasmodium relictum matutinum* can only be differentiated from *P. r. relictum* by the presence of characteristic vacuoles in the cytoplasm of phanerozoites in the former (Corradetti and others, 1962); similar vacuoles are found in *P. gallinaceum,* but the blood stages are different – so here again it would be impossible to select a phanerozoite alone as the type specimen.

(4) Characteristic features may not be apparent in a single blood film. Thus, typical schizonts may be present on one day, typical trophozoites on another, and typical gametocytes on yet another, e.g. in *P. falciparum* and *P. cathemerium.* Also the typical quartan, tertian, or quotidian course of development in the blood (from the ring stage to the mature schizont in the phase of asexual multiplication) will only be revealed by examining successive specimens at daily intervals for at least four days. This is a critical distinction between *P. knowlesi* one day) and *P. coatneyi* (two days) where the morphology of the blood forms may be indistinguishable (though in other species the blood stages may be distinctive).

(5) The isosporan coccidial parasites, formerly placed in the Toxoplasmatea, present a particularly difficult problem, owing to the fact that their two stages, in different hosts, had been placed in separate genera (see Levine, 1977). This is a separate problem, but the hapantotype concept is also involved, because identification of the species again depends upon the morphological characters of both stages. Thus from a genus *(Sarcocystis)* with two hosts and distinctive stages in each, let us take three species, A, B and C. In one host (a prey host), A and B are morphologically indistinguishable but C is different; while in the second host (a predator host), A and C are indistinguishable but B is different. It therefore requires both forms to define the species and a multiple type specimen is necessary. This is illustrated in the following table:

Parasite species	Sarcocyst in prey host	Sporocyst in predator host
A. *Sarcocystis muris*	thin walled (in the mouse)	8.5 x 10.3μm (in the cat)
B. *S. cruzi* (synonym *S. bovicanis)*	thin walled (in the ox)	10.8 x 16.3μm (in the dog)
C. *S. hirsuta* (synonym *S. bovifelis)*	thick walled (in the ox)	7.8 x 12.5μm (in the cat)

In the first two parasites the sarcocysts in the prey are indistinguishable by light microscopy and in the first and last the range of measurements of the sporocysts in the predator overlaps.

8. It is therefore our contention that most species in the Apicomplexa cannot be defined by reference to a unique type specimen and that a multiple type specimen is essential to the definition of what are perfectly good species. We prefer the hapantotype concept to any system based on a holotype supported by paratypes, or on syntypes, because we frequently find that a single preparation may contain a number of organisms, each indispensable and of equal importance in the definition of the species.

REFERENCES

BEALE, G.H., CARTER, R. & WALLIKER, D. 1978. Genetics, Chapter 5 in *Rodent malaria* (Killick-Kendrick & Peters eds.) Academic Press, London, 406 pp.

BRAY, R.S. 1962. On the parasitic protozoa of Liberia. VII. Haemosporidia of owls. *Arch. Inst. Pasteur Algérie*, vol. 40: 201–207

CORRADETTI, A., MORCOS, W.M. & NERI, I. 1962. Sulla produzione di forme endoistocitarie nei canarini infettati con il ceppo italiano di *Plasmodium matutinum* derivato di *Turdus iliacus. Parassitologia*, vol. 4: 105–108

GARNHAM, P.C.C., BRAY, R.S., COOPER, W., LAINSON, R., AWAD, F.I. & WILLIAMSON, J. 1955. The preerythrocytic stage of *Plasmodium ovale. Trans. roy. Soc. trop. Med. Hygiene*, vol. 47: 158–167

GARNHAM, P.C.C. 1969. The preservation of type specimens of protozoa with special reference to the Haemosporidia. *Parassitologia*, vol. 11: 1–8

JAMES, S.P., NICOL, W.D. & SHUTE, P.G. 1932. *Plasmodium ovale* Stephens: passage of the parasite through mosquitoes and successful transmission by their bite. *Ann. trop. Med. Parasitol.*, vol. 26: 139–145

KILLICK-KENDRICK, R. 1974. Parasitic protozoa of the blood of rodents. I: The life-cycle and zoogeography of *Plasmodium berghei nigeriensis* subsp. nov. *Ann. trop. Med. Parasitol.*, vol. 67: 261–277

LEVINE, N. 1970. Taxonomy of the protozoa. *J. Parasitol.*, vol. 56(II): 208–209

——— 1977. Nomenclature of *Sarcocystis* in the ox and sheep and of faecal coccidia of the dog and cat. *J. Parasitol.*, vol. 63: 36–51

OPINION 1125
CERATOPHYLLUS SORICIS DALE, 1878 (INSECTA; SIPHONAPTERA): DESIGNATION OF A NEOTYPE UNDER THE PLENARY POWERS

RULING – (1) Under the plenary powers:

(a) all fixations of type specimen for the nominal species *Ceratophyllus sorecis* [*sic*] Dale, 1878, hitherto made are hereby set aside and the neotype designated by Smit, 1960, is hereby designated as type of that species;

(b) the spelling *soricis* is hereby ruled to be the correct original spelling of the specific name published as *sorecis* Dale, 1878, in the binomen *Ceratophyllus sorecis.*

(2) The specific name *soricis* Dale, 1878, as defined by reference to the neotype designated under the plenary powers in (1) (a) above, and as ruled to be the correct original spelling under the plenary powers in (1) (b) above of the specific name in the binomen *Ceratophyllus soricis,* is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2661.

(3) The specific name *sorecis* Dale, 1878, as published in the binomen *Ceratophyllus sorecis* (an incorrect original spelling by reason of the ruling under the plenary powers in (1) (b) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1047.

HISTORY OF THE CASE Z.N.(S.) 1618

An application for the stabilisation of the name *Ceratophyllus soricis* Dale, 1878 was first received from Mr G.H.E. Hopkins *(Zoological Museum, Tring, Herts., U.K.)* on 18 June 1965. It was sent to the printer on 12 August 1965 and printed on 2 November 1965 in *Bull. zool. Nom.* vol. 22: 233–234. Public Notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to seven entomological serials. Dr Holthuis commented that the spelling *soricis* could only be validated by the use of the plenary powers, and that the original type material could not, as such, be set aside. Both these points were taken into account in drafting the ruling here given.

DECISION OF THE COMMISSION

On 4 September 1967 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1967) 37 for or against the proposals set out in *Bull. zool. Nom.* vol. 22: 234. At the close of the voting period on 4 December 1967 the state of the voting was as follows:

Affirmative Votes – twenty (20), received in the following order: China, Lemche, Holthuis, Simpson, Vokes, Obruchev, Sabrosky, do Amaral, Mayr, Ride, Brinck, Munroe, Bonnet, Alvarado, Boschma, Binder, Uchida, Mertens, Forest, Kraus

Negative Votes – none (0)

Leave of Absence – Evans.

Late affirmative votes were received from Tortonese and Jaczewski.

ORIGINAL REFERENCES

The following is the original reference to a name placed on an Official List and an Official Index by the ruling given in the present Opinion:

soricis (correction under the plenary powers of *sorecis*), *Ceratophyllus,* Dale, 1878, *History of Glanville's Wootton in the County of Dorset:* 321

The following is the original reference to a designation of neotype ratified under the plenary powers by the ruling given in the present Opinion: of the specimen designated by Smit, 1960 (August: *Bull. brit. Mus. (nat. Hist.),* Entom. vol. 9: expl. fig. 10, p. 378; October, *Ent. Gazette,* vol. 11: 197) for *Ceratophyllus soricis* Dale, 1878.

CERTIFICATE

I certify that the votes cast on voting paper (67)37 were cast as set out above, that the proposals contained in that voting paper have been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1125.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
17 October 1978

OPINION 1126
TANAGRA CYANEA LINNAEUS, 1766 (AVES) CONSERVED

RULING – (1) Under the plenary powers, the specific name *cyanea* Linnaeus, 1758, as published in the binomen *Loxia cyanea,* is hereby suppressed for the purposes of both the Law of Priority and the Law of Homonymy.

(2) The type locality of *Fringilla brissonii* Lichtenstein, 1823, is hereby ruled to be Bahia, Brazil.

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *brissonii* Lichtenstein, 1823, as published in the binomen *Fringilla brissonii* (Name Number 2662) with an endorsement that the type locality of the species is Bahia, Brazil [see note at end of Ruling];

(b) *cyanea* Linnaeus, 1766, as published in the binomen *Tanagra cyanea* (Name Number 2663).

(4) The specific name *cyanea* Linnaeus, 1758, as published in the binomen *Loxia cyanea,* and as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1048.

[Note on the above Ruling]

[The Commission, when asked to vote on the type locality of *Fringilla brissonii* Lichtenstein, 1823, was not asked to place that name on the Official List. However, as (a) that name becomes the valid name of the South American Ultramarine Grosbeak through the suppression of *Loxia cyanea* Linnaeus, 1758, (b) the request concerning the type locality was accepted, (c) there is no "Official List of Type Localities", and (d) it is necessary to register the Commission's ruling in some way or another, I have concluded that an entry in the Official List of Specific Names in Zoology for *Fringilla brissonii* Lichtenstein, 1823 is implicit in that ruling. R.V.M. 24 October 1978]

HISTORY OF THE CASE Z.N.(S.) 1929

An application for the conservation of *Tanagra cyanea* Linnaeus, 1766, was first received from Dr E. Eisenmann, Dr R.A.

Paynter, Jr. and [the late] Charles Vaurie (all of the *American Museum of Natural History, New York*) on 18 May 1970. It was sent to the printer on 1 July 1970 and published on 29 March 1971 in *Bull. zool. Nom.*, vol. 27: 259–261. Public Notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to six ornithological serials. No comment was received.

DECISION OF THE COMMISSION

On 28 February 1973 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1973)6 for or against the proposals set out in *Bull. zool. Nom.* vol. 27: 261. At the close of the voting period on 28 May 1973 the state of the voting was as follows:

Affirmative Votes – twenty-two (22) received in the following order: Holthuis, Eisenmann, Lemche, Mayr, Simpson, Corliss, Vokes, Habe, Alvarado (conditional), Rohdendorf, Melville, Willink, Starobogatov, Sabrosky, Tortonese, Heppell, Nye, Binder, Brinck, Bernardi, Bayer, Ride

Negative Vote – Dupuis.

A late affirmative vote was received from Kraus. No voting paper was returned by Erben.

Dupuis and Ride commented as follows:

Dupuis: "On ne peut supprimer un nom linnéen de 1758 sous prétexte qu'un zoologiste pense pouvoir réunir deux genres."

Ride: "The amendment to Article 74a(ii) which was adopted at Monaco (*Bull. zool. Nom.* vol. 29: 181) makes it clear that the request to fix the type locality should be achieved by the selection of a neotype if stability is to be reached. The applicants do not make it clear whether a type exists. If there is no type, the applicants can be asked to select a neotype from Bahia. If there is already a type, the Commission may need to annul its selection and replace it with another."

Dr Ride's comment was sent to Dr Eisenmann, who replied: "The purpose of our application was to avoid the confusion that would have resulted from the transfer of the name *Passerina cyanea* (Linnaeus, 1766) of the common North American Indigo Bunting, to the South American Blue Grosbeak, *Cyanocompsa cyanea* (Linnaeus, 1758) as a result of the generic merger proposed by Paynter. To accomplish this, the earlier specific name was suppressed by exercise of the plenary powers and the next oldest name available for the Brazilian species, based on *Fringilla brissonii* Lichtenstein, 1823, was adopted. *Loxia cyanea* Linnaeus, 1758, had had its type locality restricted to Bahia, Brazil; we asked that the type locality of Lichtenstein's *brissonii* be similarly restricted, as

had been done tentatively by Hellmayr in 1938.

"The Monaco amendment to Art. 74 as to selection of a lectotype superseding previous restrictions presents no problems, so far as I can see. This provision applies only to a situation where there are syntypes, i.e. where there is a type series but no holotype. Lichtenstein, in describing *Fringilla brissonii,* had no syntypes or type series. He was merely giving a binominal name to *Loxia caerulea* var β Gmelin *Syst. Nat.* ed. 13, vol. 1 (2): 863, which was solely based on Brisson's description of the "Bouvreuil bleu du Brésil" (*Orn.* vol. 3: 321, pl. 17, fig. 2). There is no indication that Brisson (to honour whom Lichtenstein named the bird *brissonii*) had a series of specimens of the Brazilian species he described. So there is no danger that someone will select a lectotype of a subspecies not found in Bahia. As to selecting a neotype, I can see no justification for this. If Brisson's holotype should be found hereafter of his "Bouvreuil bleu du Brésil" and could be proved to be a subspecies different from that found in Bahia, it would supersede the neotype, but no harm would result, for the specific name *brissonii* would still be the oldest (as a result of the suppression of the Linnean *cyanea,* 1758), so I can see no value in trying to provide a neotype, and I would have to engage in a great deal of futile work to comply with the Code provisions relating to neotypes."

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

brissonii, Fringilla, Lichtenstein, 1823, *Verz. Doubl. Berliner Mus.:* 22

cyanea, Loxia, Linnaeus, 1758, *Syst. Nat.* ed. 10: 174

cyanea, Tanagra, Linnaeus, 1766, *Syst. Nat.* ed. 12: 315.

CERTIFICATE

I certify that the votes cast on Voting Paper (73)6 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1126.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London 24 October 1978

OPINION 1127
PLANARIA MONTENIGRINA MRAZEK, 1904 (PLATYHELMINTHES) GIVEN NOMENCLATURAL PRECEDENCE OVER *PHAGOCATA CORNUTA* SHISHKOV, 1903

RULING – (1) Under the plenary powers it is hereby ruled that the specific name *montenigrina* Mrázek, 1904, as published in the binomen *Planaria montenigrina,* is to be given nomenclatural precedence over the specific name *cornuta* Shishkov, as published in the binomen *Phagocata cornuta,* whenever those two names are regarded as synonyms.

(2) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers and endorsements specified:

(a) *montenigrina* Mrázek, 1904, as published in the binomen *Planaria montenigrina* (Name Number 2664), with an endorsement that it is to be given nomenclatural precedence over the specific name *cornuta* Shishkov, 1903, as published in the binomen *Phagocata cornuta* whenever those two names are regarded as synonyms;

(b) *cornuta* Shishkov, 1903, as published in the binomen *Phagocata cornuta* (Name Number 2665), with an endorsement that it is not to be given priority over the specific name *montenigrina* Mrázek, 1904, as published in the binomen *Planaria montenigrina,* whenever those two names are regarded as synonyms.

HISTORY OF THE CASE Z.N.(S.) 2079

An application for the conservation of *Planaria montenigrina* Mrázek, 1904 (Platyhelminthes) was first received from Dr Roman Kenk *(National Museum of Natural History, Washington D.C. 20560, USA)* on 5 February 1973. After correspondence with the applicant it was sent to the printer on 14 January 1974 and published on 31 July 1974 in *Bull. zool. Nom.,* vol. 31: 62–63. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials. Support was received from Dr Ian R. Ball *(Royal Ontario Museum, Toronto, Canada).* No adverse comment was received.

The original application had been for the suppression of *Phagocata cornuta* Shishkov, 1903, for the purposes of the Law of Priority but not for those of the Law of Homonymy. In February

1978 Dr Kenk was asked if he would accept the use of the "relative precedence" procedure in his application, and he agreed to do so.

DECISION OF THE COMMISSION

On 7 April 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)9 for or against the proposals set out in *Bull. zool. Nom.*, vol. 31: 62. At the close of the voting period on 7 July 1978 the state of the voting was as follows:

Affirmative Votes – seventeen (17) received in the following order: Melville, Holthuis, Eisenmann, Mroczkowski, Vokes, Sabrosky, Cogger, Tortonese, Binder, Willink, Nye, Alvarado, Corliss, Starobogatov, Heppell, Welch, Bayer

Negative Votes – four (4): Brinck, Habe, Bernardi, Ride

No votes were returned by Dupuis and Kraus.

The following comments were returned by members of the Commission with their voting papers:

Brinck: "I cannot see that the 'outstanding' papers are so outstanding that they (and previous usage) should deprive *cornuta* of its rights."

Sabrosky: "I was disturbed at first by the apparent disregard by so many authors of the synonymy of *montenigrina* under *cornuta.* However, Dr Kenk has shown me that for many years the species were referred to the genus *Planaria,* and in this genus *cornuta* Shishkov was preoccupied two or three times over as a junior secondary homonym, hence authors naturally adopted *montenigrina".*

Habe: "Shishkov stated that *Planaria montenigrina* Mrázek was a synonym of *Phagocata cornuta* Shishkov. Therefore Shishkov's name should be preserved to science."

Heppell: "I vote for the proposal only in that I vote for the addition of *montenigrina* Mrázek to the Official List. If this does not give the name precedence over *cornuta* Shishkov and any other presumed synonyms then the status of names on the Official Lists must be reviewed as a matter of urgency to return to the Commission's original intention of ensuring protection for the listed names."

Bernardi: "Il me semble d'après le texte de Kenk que *cornuta* date de 1903 et *montenigrina* de 1904. Comme il s'agit d'êtres vivants sans importance économique je préfère appliquer simplement la loi de Priorité et utiliser *cornuta.*"

Welch: "This is an appropriate application of the 'relative precedence' principle, for the original argument of synonymy seems weak. Some personal observations would have been welcome

supportive evidence for the applicant's literature review. Valkanov (1938) seems to be the last paper on the usage of *Phagocata cornuta,* though we are not told that this is so. The question arises in my mind whether an opponent of the application could give a list of recent usages of *Phagocata cornuta?* A comment on this point by the applicant would have been helpful."

Ride: "The name is not an unused name. The case is one of a well known junior subjective synonym that may be threatened by a less used senior name. Some taxonomic research should be done before the Commission acts."

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official List by the ruling given in the present Opinion:

cornuta, Phagocata, Shishkov, 1903, *Archs Zool. exp. gen.* (4), vol. 1: 401–409, pl. 16

montenigrina, Planaria, Mrázek, 1904, *Sitzungsber. k. böhm. Ges. Wiss., Math.-Nat. Kl.,* Jahrg. 1903 (33), 43pp., 2 pls.

CERTIFICATE

I certify that the votes cast on voting paper (78)9 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1127.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
6 November 1978

BUCEPHALUS BAER, 1827, AND *B. POLYMORPHUS* BAER, 1827 (TREMATODA); PROPOSED USE OF THE PLENARY POWERS TO CONSERVE THESE NAMES IN ACCORDANCE WITH GENERAL USE. Z.N.(S.) 2251

By Barbara Baturo *(Research Centre for Parasitology, Warsaw, Poland)*

Abstract. - Recent work on trematode parasites of freshwater fishes has shown that, if the Law of Priority is strictly applied, the species commonly known as *Rhipidocotyle illensis* (Ziegler, 1883) Vejnar, 1956, must be known as *R. polymorphus* (Baer, 1827) and the forgotten name *Gasterostomum fimbriatum* Siebold, 1848 must be applied to the species widely known as *Bucephalus polymorphus* Baer, 1827. At the same time, the well known generic name *Rhipidocotyle* Diesing, 1858 must fall as a synonym of *Bucephalus* Baer, 1827, and the forgotten name *Gasterostomum* Siebold, 1848 must be revived for the genus known at present as *Bucephalus.* The Commission is asked to take the necessary steps to prevent these changes being made.

In European freshwater fishes there are two common species of trematodes of the family BUCEPHALIDAE, known as *Bucephalus polymorphus,* Baer, 1827 and *Rhipidocotyle illensis* (Ziegler, 1883) Vejnar, 1956. It has been assumed that *Bucephalus polymorphus* develops from the cercaria described under this name by Baer in 1827, but the cercaria of the trematode now known by that name has not yet been described, although it was figured by Kinkelin (1968).

2. While studying the biology of these two species, both of which occur in Poland, I examined bivalves (the first intermediate host), cyprinid fishes (the second intermediate host) and predatory fishes (the definitive host); I found two different cercariae from which I experimentally obtained metacercariae of two species, but the metacercaria of *Rhipidocotyle illensis* developed from cercariae identical with those described by Baer as *Bucephalus polymorphus.* Detailed data on the morphology of all developmental stages can be found in Baturo (1977).

3. As a result of this study it has become necessary to set in order the names of these two species of Trematoda. For stability of nomenclature it is necessary to maintain the names commonly used

and accepted in all keys, textbooks and monographs: the generic name *Bucephalus* and the specific name *B. polymorphus* for the species known under this name; the other species, which belongs to the genus *Rhipidocotyle* Diesing, 1858, should under the Law of Priority be known as *R. campanula* (Dujardin, 1845). The history of the case is as follows.

4. Baer (1827:570–589) established the genus *Bucephalus* for the new species *B. polymorphus* (the type species by monotypy). He based the description on sporocysts and cercariae from the bivalves *Anodonta mutabilis* Clessin and *Unio pictorum* Linnaeus.

5. In 1845 Félix Dujardin described from the intestine of *Esox lucius* Linnaeus small adult trematodes which, according to the author, represent the same species as metacercariae that he had formerly found on the branchia of *Cyprinus idus* Linnaeus. He classified them in the genus *Distoma* and gave the new name *campanula*. The description of the anterior organ given by Dujardin suggests that he was dealing with the adult trematode known today under the name *Rhipidocotyle illensis* (Ziegler, 1883).

6. Siebold (1848) gave the first short description of the adult trematode from the intestine of *Perca fluviatilis* Linnaeus and *Lucioperca sp.* and erected the new genus *Gasterostomum* for it with the new species *fimbriatum*. Siebold expressed the assumption that the cercaria described by Baer was a larva of this adult stage.

7. Wagener (1852, 1857, 1858) gave in his works a more accurate description of *Gasterostomum fimbriatum*, together with drawings of the trematodes. He states that the trematode *G. fimbriatum* that he found is characterised by five tentacles on the anterior organ. In his next work he presented drawings of the trematode described and said that *G. fimbriatum* Siebold was probably a synonym of *Bucephalus polymorphus* Baer. A year later Wagener considered *G. fimbriatum* Siebold and *Distoma campanula* Dujardin to be synonyms of *B. polymorphus*. He regarded *G. fimbriatum* Siebold as a sexually mature, tailless *B. polymorphus* Baer.

8. Ever since Wagener's papers, the view has been adopted that the adult trematode *G. fimbriatum* Siebold, characterised by the presence of long tentacles on the anterior sucker, develops from the cercariae described under the name *Bucephalus polymorphus*. Diesing questioned this view in 1858, but by reason of erroneous interpretations by this author in other matters, his works have not been taken into account.

9. In 1883 Ziegler obtained metacercariae experimentally by infecting *Leuciscus erythrophthalmus* Linnaeus with *B. polymorphus* cercariae developed in *Anodonta mutabilis* Clessin from

the Ille river. In describing and illustrating the material obtained, he pointed out the morphological differences between the specimens reared and *G. fimbriatum* Siebold, but he did not determine unequivocally the specific distinction of these two forms. He stipulated, however, that in case the differences observed by him should prove to be specific differences, he proposed to call the reared form *Gasterostomum illense.*

10. Lühe (1909) considered *G. fimbriatum* as a synonym of *B. polymorphus* Baer, but the description and drawing included in the key correspond to *illensis.* Similarly Eckmann (1932) acknowledged the existence of only one species, recognising *G. fimbriatum* as a synonym of *B. polymorphus* and questioning whether the form obtained by Ziegler was a separate species.

11. A return to the former concept of the occurrence of more than one species of BUCEPHALIDAE in European freshwater fishes dates from the work of Koval (1949), who recorded two species in the fishes of the River Dnieper. She described one of them as a new species, *Bucephalus markewitschi,* and used the name *B. polymorphus* Baer for the second species, which corresponded with *G. illense.*

12. This proposition was not accepted, and Vejnar (1956), for example, predicating the existence of two species of trematodes in Percid fishes, regarded the form with tentacles as *B. polymorphus* Baer and identified the other species with the forms described by Ziegler. He transferred this species to the genus *Rhipidocotyle* Diesing, 1858, using the combination *Rhipidocotyle illense* [*sic*], (Ziegler, 1883). Vejnar's view was supported by Kozicka (1959), who included in her work the history of the study of one of these trematodes, together with detailed descriptions and drawings of adult worms of both species. Kozicka treated the name *B. markewitschi* Koval as a synonym of *B. polymorphus* Baer. The characters mentioned by Kozicka as differentiating the two species have become key characters and are quoted in all recent monographs and keys (e.g. Skrjabin, 1962, *Trematody zhivotnych i cheloveka;* Yamaguti, 1971, *Synopsis of Digenetic Trematodes of Vertebrates;* Bykovskij, 1962, *Opredelitel' parazitov preznovodnych ryb SSSR;* Ergens & Lom, 1970, *Puvodci parasitarnich nemoci ryb.*

13. Dollfus (1968) discussed the problems of synonymy once again. Presenting the documentation of the manuscript of the chapter on Trematodes from Dujardin's *L'histoire naturelle des Helminthes,* he drew attention to the likeness of the drawing of *Distoma campanula* made by Dujardin to *R. illensis* and proposed the new combination *Rhipidocotyle campanula* (Dujardin, 1845) for this species.

14. Finally, it is necessary to mention the paper by Kinkelin

and others (1968) who, in a study of the pathogenic effects of *B. polymorphus* cercariae, presented photographs of three developmental stages of this trematode. Cercariae from *Dreissena polymorpha* Pallas differ from *B. polymorphus* cercariae drawn by Baer. The metacercariae and adult are characterised by finger-like tentacles on the anterior sucker. Although the authors did not discuss this problem in their paper, thanks to their correct documentation the adult stage with finger-like tentacles on the anterior sucker was for the first time associated with its corresponding cercaria. My study confirms that these are successive developmental stages of one species.

15. Thus, according to the Law of Priority, the species commonly known as *Rhipidocotyle illensis* (Ziegler, 1883) Vejnar, 1956, whose adult develops from cercariae described by Baer (1827), should bear the name *polymorphus* Baer, 1827, while the forgotten name *fimbriatum* Siebold, 1848, should be restored for the species widely known as *Bucephalus polymorphus* Baer, 1827. At the same time, it is necessary to regard the generic name *Rhipidocotyle* Diesing, 1858, as a synonym of *Bucephalus* Baer, 1827, and to validate the forgotten name *Gasterostomum* Siebold, 1848, for the genus known at present as *Bucephalus.*

16. The introduction of such changes, though in accordance with the Law of Priority, disagrees with the principle of stability and universality of nomenclature. The key characters of trematodes are based on the morphology of the adults and metacercariae, not on the cercariae. Likewise, most data in the literature concern these two developmental stages. Both species are common parasites of fishes and are widely met as metacercariae and adults. For many practising parasitologists the cercariae from which the metacercariae and adults develop are often unknown — as witness the paper by Kinkelin and others (1968), in which the authors, presenting adequate photographic documentation, did not observe the fact that they were dealing with unknown cercariae. Strict application of the Law of Priority to the nomenclature of these common fish parasites will lead to much confusion and erroneous identification of material.

17. Through the cooperation of Dr G. Hartwich, syntypes of *G. fimbriatum* Siebold, 1848, prepared by Eckmann (1932) have been found in the Zoological Museum, Humboldt University, Berlin. By designating one of these as the lectotype of *G. fimbriatum* (and I hereby so designate microscopic preparation No. 1655b) and also as the neotype of *Bucephalus polymorphus* Baer, 1827, stability of nomenclature can be assured. This latter action, however, can only be taken by the Commission using its plenary

powers, because the proposed neotype does not agree "with what is known of the original type-material" as is required under Article 75c(4).

18. Before putting precise proposals to the Commission, it is necessary to clarify the status of the genus *Rhipidocotyle* Diesing, 1858. This was proposed by Diesing (1858: 313, 361) with two included species, *Distoma gracilescens* Rudolphi, 1819: 111, 409, and *Gasterostomum minimum* Wagener, 1852: 558, neither of which was designated as type species. According to Eckmann, 1932: 99, Stiles & Hassall "1906" [*sic;* correctly 1908: 358] were the first authors to designate a type species, and chose *gracilescens.* However, Stiles & Hassall only said "(type probably *gracilescens*)", and that cannot be accepted as a valid designation. Nicoll, 1914: 490, definitely designated *Gasterostomum minimum* Wagener, 1852: 558, and that stands as the first valid designation of a nominal type species for *Rhipidocotyle.* The valid name for this species is *R. galeata* (Rudolphi) (*Monostoma galeatum* Rudolphi, 1819: 86).

19. Accordingly, the International Commission is requested:

(1) to use its plenary powers to set aside all designations of type specimen hitherto made for the nominal species *Bucephalus polymorphus* and to designate microscopic preparation No. 1655b in the Zoological Museum, Humboldt University, Berlin, as neotype of that species;

(2) to place on the Official List of Generic Names in Zoology:

(a) *Bucephalus* Baer, 1827 (gender, masculine), type species, by monotypy, *Bucephalus polymorphus* Baer, 1827;

(b) *Rhipidocotyle* Diesing, 1858 (gender: feminine), type species, by subsequent designation by Nicoll, 1914, *Gasterostomum minimum* Wagener, 1852;

(3) to place on the Official List of Specific Names in Zoology:

(a) the specific name *polymorphus* Baer, 1827, as published in the binomen *Bucephalus polymorphus* (specific name of type species, as defined by the neotype designated under the plenary powers in (1) above, of *Bucephalus* Baer, 1827);

(b) the specific name *galeatum* Rudolphi, as published in the binomen *Monostoma galeatum;*

(4) to place on the Official List of Family-Group Names in Zoology the family name BUCEPHALIDAE Poche, 1907 (type genus *Bucephalus* Baer, 1827).

I should like to express my gratitude to Miss G. Supel for her help in translating my work, and to Docent Dr hab. M. Mroczkowski for his advice in formulating my application.

REFERENCES

BAER, K. 1827. Beiträge zur Kenntniss der niedern Tiere. *Nova Acta Acad. Nat. Curios.*, vol. 13: 523–562.

BATURO, B. 1977. *Bucephalus polymorphus* Baer, 1827, and *Rhipidocotyle illense* (Ziegler, 1883) (Trematoda, Bucephalidae): morphology and biology of developmental stages. *Acta parasit. polonica*, vol. 24: 203–220.

BYKHOVSKIJ, B.E. (Editor). 1962. *Opredelitel' parazitov presnovodnykh ryb SSSR*. Izd. A.N.SSSR, Moscow and Leningrad, 776 pp.

DIESING, C.M. 1836. Monographie der Gattungen *Amphistoma* und *Diplodiscus*. *Ann. Wiener Mus. Naturg.*, vol. 1: 235–260.

——— 1850. *Systema Helminthum*, vol. 1. Vindobonae.

——— 1858. Revision der Myzhelminthen. Abtheilung: Trematoda. *Sber. k. Akad. Wiss. Wien*, Math.-nat. Cl., vol. 32: 307–390.

DOLLFUS, R.P. 1968. Les Trématodes de l'Histoire naturelle des Helminthes de Félix Dujardin (1845). *Mém. Mus. nat. Hist. nat. Paris* (A) vol. 54: 119–196.

DUJARDIN, F. 1845. *Histoire naturelle des helminthes ou vers intestinaux.* Paris XII + 645 + 15 pp.

ECKMANN, F. 1932. Beiträge zur Kenntniss der Trematodenfamilie Bucephalidae. *Z. Parasitenk.*, Abt. F, vol. 5: 94–111.

ERGENS, R. & LOM, R. 1970. *Puvodci parasitarnich nemocri ryb.* Academia, Prague, 384 pp.

KINKELIN, P. DE, TUFFREY, G., LEYNAUD, G. & ARRIGNON, J. 1968. Etude épizootiologique de la bucéphalose larvaire *(Bucephalus polymorphus)* dans de peuplement piscicole du bassin de la Seine. *Rech. vétér.*, No. 1: 77–98.

KOVAL, V.P. 1959. Novyj vid *Bucephalus* v rybak Dnepra. *Dokl. Akad. Nauk SSSR*, vol. 68: 205–208.

KOZICKA, J. 1959. Parasites of fishes of Druzno lake (Parasite fauna of the biocenosis of Druzno lake – Part VIII). *Acta parasit. polonica*, vol. 7: 1–72.

LUHE, M. 1909. *Parasitische Plattwürmer.* I. Trematoden. Die Süsswasserfauna Deutschlands (ed. A. Brauer), Heft 17, 217 pp.

NICOLL, W. 1914. The trematode parasites of fishes from the English Channel. *J. mar. biol. Assoc. U.K.* (2) vol. 10: 466–505.

PHILIPPI, F. de 1837. Descrizione di nuovi entozoi trovati in alcuni molluschi d'acqua dolce. *Bibl. ital.*, vol. 87: 333–340.

POCHE, F. 1907. Einige Bemerkungen zur Nomenclatur Trematoden. *Zool. Anz.*, vol. 31: 124–126.

RUDOLPHI, C.A. 1819. *Entozoorum synopsis, cui accedunt mantissa et indices locupletissimi.* Berlin.

SIEBOLD, Th. C. 1848. *Lehrbuch der vergleichende Anatomie der wirbellosen Tiere*, Th. 1. Berlin, XV + 679 pp.

SKRJABIN, K.I. 1962. Semejstvo Bucephalidae Poche, 1907. In *Trematody zhivotnykh i cheloveka* (ed. K.I. Skrjabin), Izd. A.N. SSSR, Moscow and Leningrad, vol. 20: 183–551.

STILES, C.W. & HASSALL, A. 1908. *Index-catalogue of medical and veterinary zoology.* Subjects: Trematoda and trematode diseases. Washington, D.C.

WAGENER, G.R. 1852. Enthelminthica III. Uber *Distoma dimorpha* Diesing, *Distoma marginatum* Rud. *Arch. Anat. Phys. Med.* Jahrg 1852: 555–569.

____. 1857. Beiträge zur Entwicklungs-Geschichte der Eingeweidewürmer. *Natuurk. Verh. holland. Maatsch. Vet.*, Haarlem, vol. 13: 1–112.

____. 1858. Enthelminthica IV. Uber *Distoma campanula (Gasterostomum fimbriatum* Siebold) Duj. und *Monostomum bipartitum* Wedl. *Arch. Naturges.*, vol. 24: 250–256.

VEJNAR, F. 1956. Prispevek k helminthofaune nasich okounovitych ryb. *Sb. vys. Sk. zemed. les. Fac. Brne* (B), vol. 4 (25): 161–176.

YAMAGUTI, S. 1971. *Synopsis of digenetic trematodes of vertebrates,* I, II. Keigaku Publishing Co., Tokyo.

ZIEGLER, H.E. 1883. *Bucephalus* und *Gasterostomum. Z. wiss. Zool.*, vol. 39: 537–571.

PROHYSTEROCERAS SPATH, 1921, AND *NEOKENTROCERAS* SPATH, 1921 (CEPHALOPODA, AMMONOIDEA); PROPOSED DESIGNATION OF TYPE SPECIES IN CONFORMITY WITH ESTABLISHED USAGE. Z.N.(S.) 2254

By C.W. Wright and M.R. Cooper *(Department of Geology and Mineralogy, Parks Road, Oxford, England)*

Two well-known genera in the widespread ammonite fauna of the Albian stage of the Cretaceous both have by strict application of the Code type species which are contrary to their author's stated intentions and which would (in the one case) or could (in the other) alter the concepts of the genera established for a period of over fifty years.

2. L.F. Spath erected the genus *Prohysteroceras* in the following terms (1921: 286): " . . . and with compressed forms converging towards *Prohysteroceras† goodhalli* on the other" with footnote "†Gen. nov. Genotype *P. wordiei* nov., a new Angola species of the *candollianum-goodhalli* group".

3. *P. wordiei* was only described in 1922 (: 143) and was a *nomen nudum* in 1921; the species was thus ineligible as type species of *Prohysteroceras. Ammonites goodhalli* J. Sowerby, 1820 (: 100), on the other hand, was a valid species and was included in *Prohysteroceras* in 1921. Unless Spath's reference to the "*candollianum-goodhalli* group" makes *Ammonites candollianus* Pictet (1847: 361) also an included species, *A. goodhalli* is, under the Code, the type species of *Prohysteroceras* by monotypy.

4. Spath later (1932: 381) designated *Ammonites goodhalli* type species of a new subgenus of *Prohysteroceras* which he named *Goodhallites* and which he also included *A. candollianus.* Strictly speaking, *Goodhallites* is an objective synonym of *Prohysteroceras* (or a subjective synonym if *A. candollianus* were to be treated as an originally included species and were to be designated type species of *Prohysteroceras*). However, *Goodhallites* is a well-known, widespread and distinct taxon and considerable confusion would be caused if it had to be treated as a synonym of *Prohysteroceras sensu stricto.*

5. If established usage is to be preserved, the plenary powers will have to be used, either to designate *Prohysteroceras wordiei* Spath type species of *Prohysteroceras,* although it was only validly published a year after the genus, or to set aside the establishment of the genus *Prohysteroceras* in 1921, although it then included one

(or two) previously described and valid species. The first alternative seems preferable.

6. The case of *Neokentroceras* is similar. Spath introduced the genus in the following terms: (1921: 306) " . . . and *Neokentroceras* (gen. nov.*) *gracillimum* Kossmat sp." with footnote "*A post-*Subschloenbachia* development (Genotype = *N. curvicornu,* nov., from Angola, allied to *N. tectorium,* White sp.)". The following year (Spath, 1922) he described a number of species of *Neokentroceras* from Angola including (1922: 139) *N. curvicornu,* again stated (: 105) to be the type species. That species has since been generally accepted as type species, for example by Haas (1942), Reyment (1955) and Howarth (1965) in works describing species of *Neokentroceras,* and by Basse (1952) and Wright (1957) in textbooks of palaeontology.

7. Unfortunately *N. curvicornu* was not validly described until 1922 and as a *nomen nudum* in 1921 was ineligible as type species. Two valid species, *Schloenbachia gracillima* Kossmat (1895: 188) and *Ammonites tectorius* White (1887: 225), were included in *Neokentroceras* in 1921 and are eligible for selection as type species in place of *curvicornu.* However, *S. gracillima* is almost certainly not congeneric with *N. curvicornu* and *A. tectorius* is possibly not. Thus selection of either as type species would throw doubt on the interpretation of *Neokentroceras.*

8. If stability is to be preserved, therefore, the plenary powers will have to be used either to designate *N. curvicornu* as type species, although it was a *nomen nudum* in 1921, or to set aside the establishment of the genus in 1921 although it then included two valid species. The first alternative seems preferable.

9. The International Commission on Zoological Nomenclature is therefore invited, in order to maintain established usage:

(1) under the plenary powers to
  (a) designate as type species of the genus *Prohysteroceras* Spath, 1921, the species *Prohysteroceras wordiei* Spath, 1922;
  (b) designate as type species of the genus *Neokentroceras* Spath, 1921, the species *Neokentroceras curvicornu* Spath, 1922;

(2) to place the following generic names on the Official List of Generic Names in Zoology:
  (a) *Prohysteroceras* Spath, 1921 (gender: neuter), type species by designation under the plenary powers in (1) (a) above, *Prohysteroceras wordiei* Spath, 1922;
  (b) *Neokentroceras* Spath, 1921 (gender: neuter), type species, by designation under the plenary powers in (1) (b) above, *Neokentroceras curvicornu* Spath, 1922;

(3) to place the following specific names on the Official List of Specific Names in Zoology:
   (a) *wordiei* Spath, 1922, as published in the binomen *Prohysteroceras wordiei* (specific name of type species of *Prohysteroceras* Spath, 1921);
   (b) *curvicornu* Spath, 1922, as published in the binomen *Neokentroceras curvicornu* (specific name of type species of *Neokentroceras* Spath, 1921).

REFERENCES

BASSE, E. 1952. Classe des Céphalopodes: 461–688 in PIVETEAU, J. [ed.], *Traité de Paléontologie* vol. 2, Problèmes d'adaptation et de phylogénèse (Paris, Masson), 790 pp.

HAAS, O. 1942. The Vernay collection of Cretaceous (Albian) ammonites from Angola. *Bull. Amer. Mus. nat. Hist.*, vol. 81: 1–224.

HOWARTH, M.K. 1965. Cretaceous ammonites and nautiloids from Angola. *Bull. brit. Mus. nat. Hist.* (Geol.), vol. 10: 335–412.

KOSSMAT, F. 1895. Untersuchungen über die südindische Kreideformation. *Beitr. paläont. geol. Ost.-Ung.*, vol. 9: 97–203.

PICTET, F.J. 1847 in PICTET & ROUX, W. Description des mollusques fossiles qui se trouvent dans les Grès Verts des environs de Genève. *Mém. Soc. Phys. Hist. nat. Genève*, vol. 9: 257–412.

REYMENT, R.A. 1955. The Cretaceous ammonites of southern Nigeria and the southern Cameroons. *Bull. geol. Surv. Nigeria*, vol. 25: 112 pp.

SOWERBY, J. 1820 *in* SOWERBY, J. & SOWERBY J. de C., 1812–1846, *The mineral conchology of Great Britain* (London), 7 vols., 648 pls.

SPATH, L.F. 1921. On Cretaceous Cephalopoda from Zululand. *Ann. S. Afr. Mus.*, vol. 12: 217–321.

_____ 1922. On Cretaceous Ammonoidea from Angola, collected by Prof. J.W. Gregory. *Trans. r. Soc. Edinburgh*, vol. 53: 91–160.

_____ 1932. A monograph of the Ammonoidea of the Gault. *Palaeontogr. Soc. Monogr.*: 379–410.

WHITE, C.A. 1887. Contribuções á Paleontologia do Brasil. *Arch. Mus. nac. Rio de Janeiro*, vol. 7: 273 + v pp.

WRIGHT, C.W. 1957. Cretaceous Ammonoidea in ARKELL, W.J. and others, *Treatise on Invertebrate Paleontology*, Part L, Mollusca 4, Cephalopoda, Ammonoidea (Geol. Soc. America and Kansas University Press) 490 pp.

TIPULA FERRUGINEA FABRICIUS, 1805 (DIPTERA; TIPULIDAE): PROPOSED CONSERVATION. Z.N.(S.) 2255

By George W. Byers *(Department of Entomology, The University of Kansas, Lawrence, Kansas 66045, USA)*

In 1763 (*Entomologia carniolica:* 321) Scopoli described *Tipula ferruginea* from the region that is now northern Yugoslavia and northeastern Italy. This species, said to be common, was characterised as wholly ferruginous, approximately 13.5 mm long, with hyaline wings spotted near the base, and having short, attenuate antennae. Villers (1789, *C. Linnaei Entom., Fn. suec. descr. aucta,* vol. 3: 400) repeated Scopoli's description but thereafter the name seems to have disappeared from the literature. It was not, for example, included in the Kertesz *Catalogus Dipterorum* (1902–1910). No type specimen is known to which reference can be made, and no species is known that agrees with Scopoli's description.

2. In 1805 (*Systema antliatorum:* 28), J.C. Fabricius described *Tipula ferruginea* from North America (without more precise locality). Its type specimen is in the Fabricius collection in Copenhagen. This species has been transferred to the genus *Nephrotoma* Meigen, 1803, and is accordingly now known as *Nephrotoma ferruginea* (Fabricius). In the older American literature, to about 1920, it appeared as *Pachyrhina ferruginea,* but since then *Pachyrhina* Macquart, 1834, has been dropped as a synonym of *Nephrotoma. N. ferruginea* is widespread in the United States, generally from the Rocky Mountains eastward to the Atlantic seaboard. It occurs also eastward from Alberta and probably in northern Mexico. Within this range it is one of the most commonly seen species of the TIPULIDAE, as it occurs in a variety of habitats including urban lawns and gardens and is frequently attracted to lights. Although it is not a serious pest, its larvae are sometimes destructive of seedling field and garden crops. As a result, the name has appeared from time to time in the literature of American economic entomology. The name *Nephrotoma ferruginea* is firmly established in taxonomic publications treating North American TIPULIDAE (for example, the works of Professor Charles P. Alexander) and in regional lists and catalogues. The larva and pupa have been described and recent cytological studies have been published using this name.

3. A census of virtually all currently active taxonomists of the TIPULIDAE in Europe and North America has produced unanimous support for the conservation of the junior homonym, *Tipula ferruginea* Fabricius.

4. I therefore ask the International Commission on Zoological Nomenclature

(1) to use its plenary powers to suppress the specific name *ferruginea* Scopoli, 1763, as published in the binomen *Tipula ferruginea,* for the purposes of both the Law of Priority and the Law of Homonymy;

(2) to place the specific name *ferruginea* Fabricius, 1805, as published in the binomen *Tipula ferruginea,* on the Official List of Specific Names in Zoology;

(3) to place the specific name *ferruginea* Scopoli, 1763, as published in the binomen *Tipula ferruginea,* and as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Specific Names in Zoology.

OCHTHERA EXSCULPTA LOEW, 1862 (INSECTA, DIPTERA, EPHYDRIDAE): REQUEST FOR INVALIDATION OF NEOTYPE AND VALIDATION OF A REDISCOVERED HOLOTYPE. Z.N.(S.) 2256

By P.J. Clausen *(Department of Entomology, Fisheries and Wildlife, University of Minnesota, St. Paul, Minnesota, 55108, U.S.A.)*

In his Diptera of North America, Loew (1862) described three species of *Ochthera*, including *Ochthera exsculpta*. This species was described from a single, male specimen collected in Cuba by Poey. Horn & Kahle (1935–1937) indicated that the specimens of Loew's North American species were deposited in the Museum of Comparative Zoology, Harvard.

2. While conducting a revisional study of the Nearctic, Neotropical and Palaearctic species of the genus *Ochthera* in 1973, I requested the types of all three species of *Ochthera* described by Loew (1862) from the Museum of Comparative Zoology. They responded by loaning me the types of two species, but informed me that the type of *Ochthera exsculpta* was missing. A check with the Academy of Natural Sciences of Philadelphia, which Horn & Kahle (1935–37) mentioned as the deposition site of Poey's Cuban material, again produced no type.

3. Since *Ochthera exsculpta* Loew is a species which is often confused with *Ochthera loreta* Cresson and is often found in the same localities, I felt it necessary for nomenclatural stability to designate a neotype (and two "neoparatypes") for *Ochthera exsculpta* Loew (Clausen, 1977). After publication of my revision and the neotype designation, I returned the specimens to the Museum of Comparative Zoology and was then informed that the holotype was present in their collection. The holotype is from Cuba, Loew Coll., Type 11162, labelled as a male but is actually a female, and is conspecific with the neotype.

4. In compliance with Article 75(f) of the International Code, I am referring this rediscovery of the holotype of *Ochthera exsculpta* to the Commission, and I therefore request the International Commission of Zoological Nomenclature to:

(1) suppress the neotype designation of *Ochthera exsculpta* Loew (1862) made by Clausen, 1977, *Trans. amer. ent. Soc.*, vol. 103: 496, and

(2) place the specific name *exsculpta* Loew, 1862, as published in the binomen *Ochthera exsculpta* on the Official List of Specific Names in Zoology, as defined by the holotype.

LITERATURE CITED

CLAUSEN, P.J. 1977. A revision of the nearctic, neotropical and palaearctic species of the genus *Ochthera,* including one Ethiopian species, and one new species from India. *Trans. amer. ent. Soc.* vol. 103: 451–529.

HORN, W. & KAHLE, I. 1935–1937. Uber entomologische Sammlungen, Entomologen & Entomo-Museologie. *Ent. Beih.,* Berlin-Dahlem, vol. 2–4: 1–536, 38 pls., 3 figs.

LOEW, H. 1862. Monographs of the Diptera of North America. Part I. *Smiths. Misc. Coll.,* vol. 6: 1–221.

"STAPHYLINUS FULGIDUS" AS THE TYPE SPECIES OF SEVERAL STAPHYLINID GENERA (INSECTA, COLEOPTERA, STAPHYLINIDAE). Z.N.(S.) 2221

By A. Smetana *(Biosystematics Research Institute, Canada Department of Agriculture, Ottawa, Canada)*

"Staphylinus fulgidus" has been used by various authors as the type species of several staphylinid genera, namely *Gyrohypnus* Leach, 1819, *Xantholinus* Dejean, 1821, *Othius* Stephens, 1829, and *Gauropterus* C.G. Thomson, 1860. Because of the absence of strict nomenclatural rules, certain usage of the respective generic names developed in the course of the years. This usage was followed until 1939 by all modern authors; even after Tottenham (1939, 1949), and especially Blackwelder (1952), introduced drastic changes based on type species designations, the majority of authors still followed the accustomed long-standing usage. The purpose of this paper is to preserve these long-standing usages, especially that of the name *Xantholinus* (type genus of the subfamily XANTHOLININAE), which, due to the changes proposed by Tottenham and by Blackwelder, disappeared from the list of valid staphylinid genera.

2. Therefore, application is hereby made for official designation of type species of the genera concerned to preserve the accustomed long-standing usage. The cases are being referred to the Commission in accordance with Article 70a of the International Code of Zoological Nomenclature and with the amendments to the Code (*Bull. zool. Nom.* vol. 31, 1974: 79, Art. 23a–b).

3. Blackwelder (1952: 176) has shown that up to 1819, there were only two proposals of the name *Staphylinus fulgidus,* both by Fabricius (1787: 220 and 1792: 525). In 1792, Fabricius did not consider the junior name *fulgidus* a homonym since he removed in the same publication the senior name *fulgidus* to the genus *Paederus.* Blackwelder also has shown (and there is no reason why his conclusion should not be accepted) that the junior name of 1792 was the species placed in the genus *Quedius* by Erichson (1839: 486), and that in the case of the four xantholinid genera *Gyrohypnus, Xantholinus, Othius,* and *Gauropterus,* we are dealing exclusively with the senior *S. fulgidus* of 1787 (see Blackwelder, 1952: 176 for details). However, several subsequent misidentifications by (1) Paykull (1789: 22) [= *Othius punctulatus* (Goeze, 1777)], (2) Gravenhorst (1802: 48) [= *Xantholinus glabratus*

(Gravenhorst, 1802)], and (3) Stephens (1833: 258) [= *Othius punctulatus* (Goeze, 1777)] complicated the matter.

4. It was in 1819 that Samouelle (1819: 172) for the first time used *Staphylinus fulgidus* as a type species by designating it as the type species of his genus *Gyrohypnus* (ex Kirby MS.) (it was also the only species). In accordance with Article 16a(v) of the Code this constituted an indication (Art. 12) and made the name *Gyrohypnus* available. Unfortunately, this indication was obviously ambiguous and later caused considerable confusion. Most subsequent modern authors ignored the publication of *Gyrohypnus* in Samouelle's book, apparently because it was published without any formal description. They attributed the name to Mannerheim (1831: 7), who gave the first formal description of *Gyrohypnus* by including the genus in his key to genera, and they mostly considered it as a subgenus of *Xantholinus* (e.g. Ganglbauer, 1895: 477). In 1939 Tottenham tried to clarify the identity of *"Staphylinus fulgidus"* and arrived at the conclusion from indirect evidence (all details in Tottenham, 1939: 235), that the species Samouelle had in mind actually was *Staphylinus fulgidus* sensu Paykull, 1789 (synonym of *Staphylinus punctulatus* Goeze, 1777 and misidentification of *Staphylinus fulgidus* Fabricius, 1787) and therefore used the name *Gyrohypnus* for the genus known previously as *Othius* Stephens, 1829. In 1952 Blackwelder disregarded Tottenham's conclusion, arguing that there was no such species as *Staphylinus fulgidus* Paykull, 1789, for Paykull merely cited the Fabricius species from 1787. He concluded (all details in Blackwelder, 1952: 176) that *Staphylinus fulgidus* Fabricius, 1787, must be accepted as the species referred to by Samouelle and therefore the type species of *Gyrohypnus,* which becomes the correct name for the genera known previously as *Xantholinus* Dejean, 1821, *Othius* Stephens, 1829, and *Gauropterus* C.G. Thomson, 1860.

5. In 1833, Stephens (1833: 258) again employed *Staphylinus fulgidus* as a type species in the following discussion under the genus "*Gyrohypnus,* Kirby" [sic]: "*Staphylinus fulgidus* of Gravenhorst being given as the type of the genus *Xantholinus* Dahl, and that being merely a catalogue one – but subsequently characterised by the lamented Latreille as having the front tarsi dilated in either sex, a character at variance with the insect above mentioned, which is the type of the genus *Othius,* – .....". Tottenham (1939: 236) comments on Stephens's statement as follows: "On the assumption, therefore (for which there appears to be no evidence), that *fulgidus* is the type of *Xantholinus* Dahl, and because *fulgidus* will not agree with the characters which define *Xantholinus,* Stephens resurrects for *Xantholinus* the name *Gyrohypnus* Kirby of which *fulgidus* was designated type by Samouelle (1819), at the

same time making *fulgidus* the type of his new genus *Othius.*" Tottenham did not accept Stephens's statement as the type-species designation for *Xantholinus,* but identified Stephens's *Staphylinus fulgidus,* along with *Staphylinus fulgidus* cited by Samouelle (1819: 172), with *Staphylinus fulgidus* sensu Paykull, 1789 (all details in Tottenham, 1939: 236) and consequently synonymised *Othius* with *Gyrohypnus* (see also para. 2). Blackwelder (1952: 176, 279 and 404) considered Stephens's statement as the type-species designation for both *Xantholinus* and *Othius;* he referred the species back to *fulgidus* Fabricius, 1787, although on page 279 (under *Othius*) he actually gave it as "*Othius fulgidus* (Paykull) *(Staphylinus)*", and consequently synonymised both *Xantholinus* and *Othius* with *Gyrohypnus.*

6. In 1838, Westwood (1838, Gen. Syn.: 16) cited "*Staph. fulgidus* Payk." as the type species of *Othius* Leach [sic]. Tottenham (1949: 371) considered this citation as the type-species designation for *Othius,* in contradiction to his earlier statement (1939: 236 – see para. 5); he actually gave the species as "*Staphylinus punctulatus* Goeze, 1777", although on the previous page (370) he listed the synonymy "*Staphylinus punctulatus* Goeze, 1777 (= *Staphylinus fulgidus* Paykull, 1789)".

7. In 1859, C.G. Thomson (1859: 27) cited "*X. fulgidus* (Fab.): Gyll. II. 356. 71" as the type species of *Xantholinus* Dahl [sic].

8. In 1860, C.G. Thomson (1860: 187–188) fixed "*Staphylinus fulgidus* Fab. Mant. Ins. I. 220.14" (i.e. 1787) as the type species of his new genus *Gauropterus,* by monotypy. Tottenham (1939: 237) recognised this as a valid type-species designation of a valid genus, basically because he identified *Staphylinus fulgidus* used by both Samouelle, 1819: 172 and Stephens (1833: 258) as identical with *Staphylinus fulgidus* sensu Paykull, 1789 (see para. 4 and 5). On the other hand, Blackwelder (1952: 168), who referred the species back to *Staphylinus fulgidus* Fabricius, 1787 (see para. 4 and 5), synonymised *Gauropterus* with *Gyrohypnus.*

9. The above paragraphs give the basic information on all critical type-species designations using the name *Staphylinus fulgidus,* and list the changes in the usage of the four generic names as they were proposed by Tottenham and by Blackwelder. In the following paragraphs, additional comments are presented, along with my proposals to the Commission, separately for each genus.

A. *Gyrohypnus* Samouelle, 1819, ex Kirby MS

10. The name was first published by Samouelle (1819: 172) who credited it to Leach ("To my kind and valuable friend Dr

Leach I am indebted for the above and following notice of new genera, ...").

11. Of the two different interpretations of the identity of *Staphylinus fulgidus* as used by Samouelle (see para. 4), the one by Blackwelder certainly was correct and was applied in strict accordance with the Code, but it was not generally accepted, except in North America. In addition, even North American authors did not interpret Blackwelder's proposal uniformly. Hatch (1957: 237) and Moore & Legner (1975: 73) applied the name correctly and included only *fulgidus* in the genus; Arnett (1960: 247, 274), on the other hand, misinterpreted Blackwelder and included in *Gyrohypnus* not only *fulgidus,* but also over 20 other species, which did not belong there.

12. Under these circumstances Blackwelder's proposal did not actually establish any stability and the confusion continued. For these reasons, I believe that the long-established name *Gyrohypnus* should be conserved in its accustomed long-standing usage to promote the stability and uniformity of the nomenclature of the group. I request, therefore, that the Commission use its plenary powers to designate *Staphylinus fracticornis* O.F. Müller, 1776 (*Zool. Dan. Prodr.:* 99) (=*S. punctulatus* sensu auct. *non* Paykull, 1789) which suits best this purpose, as the type species of *Gyrohypnus.* This species was assigned to *Gyrohypnus* ever since Mulsant & Rey (1877: 76), whose concept of *Gyrohypnus* was followed by all subsequent authors, included it there. *Hyponygrus* (isogenotypic), proposed by Tottenham (1940: 49) for a section of *Xantholinus* under the name *Gyrohypnus* in Mulsant & Rey, 1877 (for details see Tottenham, 1940: 49), would become a junior objective synonym of *Gyrohypnus* Samouelle, 1819.

B. *Xantholinus* Dejean, 1821, ex Dahl

13. There has been confusion over the authorship of this generic name which led to differences in usage (see Tottenham, 1949: 369 and Blackwelder, 1943: 474; 1952: 404 for details).

14. The name was first published in a catalogue by Dejean (1821: 23) who included 21 species (several of them having available names) in it, the first one being *"Fulgidus. Grav."* In accordance with Article 16a(v) of the Code, the inclusion of species with available names constituted an indication (Art. 12) and made the name *Xantholinus* available, with Dejean as the author, although Dejean himself gave Dahl as the author of the genus.

15. Stephens's statement on page 258 in his 1833 publication (see para. 5) was decidedly ambiguous and was unfortunately inter-

preted differently by Tottenham and by Blackwelder (see para. 5). What Stephens said was: (1) Dahl [Dejean] gave *fulgidus* sensu Gravenhorst, 1802 [a misidentification of *fulgidus* Fabricius, 1787] as the type species of *Xantholinus* [actually Dejean only listed it first]; (2) Latreille (1829: 435) characterised *Xantholinus* later as having anterior tarsi not, or very little, dilated, which is not true of *fulgidus* sensu Gravenhorst [it is true of *fulgidus* sensu Gravenhorst, but not of *fulgidus* sensu Paykull, 1789]; Stephens obviously misidentified *fulgidus* again and the species he really meant was actually *Staphylinus fulgidus* sensu Paykull, 1789, as already suggested by Tottenham (1939: 236). This concept is supported by the fact that (1) Stephens in 1829b (:284) listed "*St. fulgidus.* Payk.F.III.377" first under the genus "*Othius,* Leach MSS", (2) Stephens in 1833 in the same publication (:253) listed "*St. fulgidus.* Paykull. – *Ot. fulgidus.* Steph. Catal. 28 No. 3035" as first under the "Genus DXV. – *Othius* Leach MSS", and (3) Westwood (1838, Gen. Syn.: 16) cited "*Staph. fulgidus* Payk." as the type species of "*Othius* Leach" (see para. 6).

16. Despite these statements and facts, Blackwelder's proposal (see para. 5), based on strict interpretation of Article 30 of the *Règles* as modified by the Paris Congress (*Bull. zool. Nom.* vol. 4: 158), was correct, except that he should have referred these misidentified type species to the Commission. However, the name *Xantholinus* has been used ever since it was erected by almost all subsequent authors, especially by all modern authors, and *Xantholinus* became later the type genus of the subfamily XANTHOLININAE; also, Blackwelder's proposal was not generally accepted, except in North America. For these reasons, I believe that the long-established name *Xantholinus* should be conserved in its accustomed long-standing usage to promote the stability and uniformity of the nomenclature of the group. I request, therefore, that the Commission use its plenary powers to designate *Staphylinus linearis* Olivier, 1794 (*Entomol.* vol. 3: No. 42: 19, pl. 4, fig. 38), which suits best this purpose, as the type species of *Xantholinus.* The genus *Xantholinus* was subsequently subdivided into large numbers of subgenera; *Staphylinus linearis* Ol. was invariably assigned by all authors to the subgenus *Xantholinus* ever since Mulsant & Rey (1877: 45) initiated the subdivision of *Xantholinus.*

C. Othius Stephens, 1829, ex Leach MS

17. The name was first published in a catalogue by Stephens (1829a: 23) who included 10 species (several of them under available names) in it, the first one being "*fulgidus,* Pay." In accordance with Article 16a(v) of the Code, the inclusion of species

with available names constituted an indication (Art. 12) and made the name *Othius* available, with Stephens as the author, although Stephens himself gave Leach as the author of the genus.

18. The taxonomic identity of this genus is determined by the type-species designation made by Stephens (1833: 258) in the statement mentioned in para. 5. The comments made under *Xantholinus* in para. 15 above apply also in this case. Stephens obviously misidentified *fulgidus* and the species he really meant was actually *Staphylinus fulgidus* sensu Paykull, 1789 (= *Staphylinus punctulatus* Goeze, 1777).

19. As in the case of *Xantholinus,* Blackwelder's proposal (see para. 5) based on strict interpretation of Article 30 of the *Règles* as modified by the Paris Congress (*Bull. zool. Nom.* vol. 4: 158) was correct, except that he did not refer the misidentified type species to the Commission. However, the name *Othius* has been used by almost all subsequent authors, and especially by all modern authors; Blackwelder's proposal was not generally accepted, except in North America. For these reasons, I believe that the long-established name *Othius* should be conserved in its accustomed long-standing usage to promote the stability and uniformity of the nomenclature of the group. I request, therefore, that the Commission use its plenary powers to designate *Staphylinus punctulatus* Goeze, 1777 (*Ent. Beitr.* vol. 1: 730) which suits best this purpose, as the type species of *Othius.*

20. It may be added that *Othius* is the type genus of a family-group taxon, used most widely at tribe level OTHIINI. Some authors treat this as a subdivison of XANTHOLININAE and others, with XANTHOLININI, as a tribe of STAPHYLININAE. If *Othius* is not stabilised as here proposed, OTHIINI will have to be replaced by a new name based on *Gyrohypnus,* and this would entail an unnecessary disturbance of stability.

D. *Gauropterus* C.G. Thomson, 1860

21. In 1859, C.G. Thomson cited *fulgidus* sensu Gyllenhal (see para. 7) as the type species of *Xantholinus.* In 1860, he divided the genus *Xantholinus* into three genera: *Gauropterus, Nudobius* and *Xantholinus,* and by including the true *fulgidus* Fabricius, 1787 (see para. 8) as the only species in *Gauropterus,* he automatically designated it as the type species. No other species has ever been cited as the type species of *Gauropterus.*

22. There is no doubt that under the strict application of the Code the name *Gauropterus* is a synonym of *Gyrohypnus* as proposed by Blackwelder, since there is no internal evidence that Leach had anything but the true *S. fulgidus* Fabricius, 1787 in mind

(see para. 8). However, the name *Gauropterus* has been used by almost all subsequent authors, and especially by all modern authors, and Blackwelder's proposal was not generally accepted, except in North America. For these reasons, I believe that the long-established name *Gauropterus* should be conserved in its accustomed long-standing usage to promote the stability and uniformity of the nomenclature of the group, with *Staphylinus fulgidus* Fabricius, 1787 (*Mant. Ins.* vol. I: 220) as the type species, as designated by C.G. Thomson (1860: 188).

23. The International Commission on Zoological Nomenclature is hereby requested to take the following actions:–

(1) to use its plenary powers:

(a) to set aside all designations of type species for the nominal genus *Gyrohypnus* Samouelle, 1819, and having done so, to designate *Staphylinus fracticornis* O.F. Müller, 1776, as type species;

(b) to set aside all designations of type species for the nominal genus *Xantholinus* Dejean, 1821, and having done so, to designate *Staphylinus linearis* Olivier, 1794, as type species;

(c) to set aside all designations of type species for the nominal genus *Othius* Stephens, 1829, and having done so, to designate *Staphylinus punctulatus* Goeze, 1777, as type species;

(2) to place the following generic names on the Official List of Generic Names in Zoology:

(a) *Gyrohypnus* Samouelle, 1819 (gender: masculine), type species, by designation under the plenary powers in (1) (a) above, *Staphylinus fracticornis* O.F. Müller, 1776;

(b) *Xantholinus* Dejean, 1821 (gender: masculine), type species, by designation under the plenary powers in (1) (b) above, *Staphylinus linearis* Olivier, 1794;

(c) *Othius* Stephens, 1829 (gender: masculine), type species, by designation under the plenary powers in (1) (c) above, *Staphylinus punctulatus* Goeze, 1777;

(d) *Gauropterus* C.G. Thomson, 1860 (gender: masculine), type species, by monotypy, *Staphylinus fulgidus* Fabricius, 1787;

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *fracticornis* O.F. Müller, 1776, as published in the binomen *Staphylinus fracticornis* (specific name of type species of *Gyrohypnus* Samouelle, 1819);

(b) *linearis* Olivier, 1794, as published in the binomen *Staphylinus linearis* (specific name of type species of *Xantholinus* Dejean, 1821);

(c) *punctulatus* Goeze, 1777, as published in the binomen *Staphylinus punctulatus* (specific name of type species of *Othius* Stephens, 1829);

(d) *fulgidus* Fabricius, 1787, as published in the binomen *Staphylinus fulgidus* (specific name of type species of *Gauropterus* C.G. Thomson, 1860).

REFERENCES

ARNETT, R.H. Jr. 1960. *The beetles of the United States (a manual for identification).* Washington, D.C. 11+1112 pp.

BLACKWELDER, R.E. 1943. Monograph of the West Indian beetles of the family Staphylinidae. *Bull. U.S. nat. Mus.* 182. Washington, D.C., VIII+658 pp.

_____ 1952. The generic names of the beetle family Staphylinidae with an essay on genotypy. *Bull. U.S. nat. Mus.* 200. Washington, D.C., IV+483 pp.

DEJEAN, P.F.M.A. 1821. *Catalogue de la collection de coléoptères de M. le Baron Dejean, ...* Paris, 136+2 pp.

ERICHSON, W.F. 1837-1839. *Die Käfer der Mark Brandenburg.* Vol. 1, Abt. 1, Berlin, 740 pp.

FABRICIUS, J.C. 1787. *Mantissa Insectorum .....* Vol. I. Hafniae, 20+348 pp.

_____ 1792. *Entomologia Systematica.* I.2. Hafniae, 538 pp.

GANGLBAUER, L. 1895. *Die Käfer von Mitteleuropa,* II. Staphylinoidea 1. Wien, 880 pp.

GOEZE, J.A.E. 1777. *Entomologische Beiträge zu des Ritter Linné 12. Ausgabe des Natursystems.* Vol. I. Leipzig, 16+736 pp.

GRAVENHORST, J.L.C. 1802. *Coleoptera Microptera Brunsvicensia.* Brunsvigae, 66+206 pp.

HATCH, M.H. 1957. The beetles of the Pacific Northwest, Part II: Staphyliniformia. *Univ. Wash. Publs Biol.* 16, IX+384 pp.

LATREILLE, P.A. 1829. *Le Règne animal ..... par M. le baron Cuvier .....* tome IV: Crustacés, arachnides et partie des insectes. 2nd ed. Paris, 28+584 pp.

MANNERHEIM, C.G. 1831. Precis d'un arrangement de la famille des Brachélytres. *Mém. Acad. Sci. St. Pétersb.* vol. 1: 415-501. Sep. Pub. 87 pp.

MOORE, I. & LEGNER, E.F. 1975. A catalogue of the Staphylinidae of America north of Mexico (Coleoptera). *Univ. Calif. Spec. Publ.* 3015. Berkeley, 514 pp.

MÜLLER, O.F. 1776. *Zoologiae Danicae prodromus, ...* Hafniae, 32+282 pp.

MULSANT, E. & REY, C. 1877. *Histoire naturelle des Coléoptères de France.* Brévipennes Xantholiniens. Paris, 128 pp., 3 pl.

OLIVIER, A.G. 1794. *Entomologie, ou histoire naturelle des Insectes, ...* Vol. 3. Paris, 557 pp., 65 pl.

PAYKULL, G. 1789. *Monographia Staphylinorum Sueciae.* Upsaliae, 82 pp.

SAMOUELLE, G. 1819. *The entomologist's useful compendium;* London, 496 pp., 12 pl.

STEPHENS, J.F. 1829a. *The nomenclature of British Insects* ..... London, 68 pp.

_____ 1829b. *A systematic catalogue of British Insects:* ..... London, XXXIV+416 pp. (Mandib.) + 388 pp. (Haustell.).

_____ 1832-1835. *Illustrations of British Entomology* ..... Mandibulata. Vol. V. London, 448 pp., pl. XXIV-XXVII.

THOMSON, C.G. 1859, 1860. *Skandinaviens Coleoptera, synoptiskt bearbetade.* Vol. I and II. Lund. Vol. I 304 pp., Vol. II 290 pp.

TOTTENHAM, C.E. 1939. Some notes on the nomenclature of the Staphylinidae (Coleoptera). Part 2. *Proc. r. ent. Soc. London* (B) vol. 8: 227-237.

_____ 1940. Some notes on the nomenclature of the Staphylinidae (Coleoptera). Part 3. *Proc. r. ent. Soc. London* (B) vol. 9: 49-53.

_____ 1949. *The generic names of the British Insects* ..... Part 9. *The generic names of the British Staphylinidae with a check list of the species.* London, pp. 343-466.

WESTWOOD, J.O. 1838. Synopsis of the genera of British Insects, in Westwood, 1840, *An introduction to the modern classification of Insects;* ..... Vol. 2. London, pp. 1-48.

METRIDIIDAE CARLGREN, 1893 (ANTHOZOA) AND METRIDIIDAE SARS, 1902 (COPEPODA): REQUEST FOR A RULING TO ELIMINATE THE HOMONYMY. Z.N.(S.) 2263

by Daphne Fautin Dunn *(Department of Invertebrate Zoology, California Academy of Sciences, Golden Gate Park, San Francisco, California 94118, U.S.A.)* and Kuni Hulsemann *(Biologische Anstalt Helgoland, Palmaille 9, 2 Hamburg 50 BRD)*

Homonymy as defined in Article 55 of the International Code of Zoological Nomenclature exists between the family-group names METRIDIIDAE Carlgren, 1893 (Anthozoa) and METRIDIIDAE Sars, 1902 (Copepoda). Both family-group names are correctly derived as specified in Articles 11(e) and 29 of the Code, the former from the generic name *Metridium* Blainville, 1824, and the latter from the generic name *Metridia* Boeck, 1865. In neither case has any other name been used to designate the family in question.

2. The generic name *Metridium* was first proposed by Oken (1815) in volume 3 of *Okens Lehrbuch der Naturgeschichte,* which was rejected for nomenclatural purposes by the International Commission on Zoological Nomenclature (Opinion 417). The next use of the name was by Blainville (1824, p. 470) for the species *Metridium dianthus,* said by the author to be synonymous with "l'*actinia plumosa* de Linnaeus". Blainville later (1830, 1834) referred to this species as *M. plumosa.* Both are now considered synonyms of *M. senile* (Linnaeus, 1761: 510) (Stephenson, 1935), the name most commonly used in the scientific literature to designate this widespread and variable species of actinian. The generic name *Metridium* was incorrectly applied by Ehrenberg (1834) to the Red Sea species *rhodostomum* that was subsequently placed among the Corallimorpharia as type species of the genus *Rhodactis* (Carlgren, 1949).

3. In his then-definitive work on the actinians of Britain, Gosse (1860) referred to the species now known as *Metridium senile* by the name *Actinoloba dianthus* (p. 11), while at the same time listing a family METRIDIADAE. Since he included no taxa in it, commenting that there were no European representatives, Gosse cannot be considered to have made the name available under Article 11e of the Code, although that family name is clearly derived from the generic name *Metridium,* which Gosse (1860) apparently

was using *sensu* Ehrenberg (1834). In 1893, Carlgren placed the genus *Metridium* in the monospecific subfamily METRIDINAE (sic) [of SAGARTIDAE (sic)], which he considered new. Stephenson (1920) raised this category to full family status. Neither mentioned the family name METRIDIADAE of Gosse (1860). As currently used, the anthozoan family METRIDIIDAE contains only the genus *Metridium,* and either one (Riemann-Zürneck, 1975) or two (Hand, 1956) species.

4. The copepod family METRIDIIDAE Sars, 1902, as originally constituted, contained the genera *Metridia* Boeck, 1865, and *Pleuromamma* Giesbrecht (in Giesbrecht and Schmeil), 1898. A third genus, *Gaussia* Wolfenden, 1905, was formally placed in this family by Sewell in 1932.

5. When Boeck introduced the genus-group name *Metridia* in 1865, he included in it the two new species *M. lucens* and *M. armata.* Subsequently, Giesbrecht (1892) synonymized *M. armata* with *Calanus longus* Lubbock, 1854. Sars (1902) included *M. armata* Boeck, 1865, in the synonymy of *M. longa* (Lubbock, 1854) and suggested that *M. longa* "may be regarded as the type of the genus". We accept this suggestion as constituting a valid designation of *M. armata* as the type-species under Article 69a(iv) of the Code.

6. Pursuant to Article 55a of the Code, we refer this case to the International Commission on Zoological Nomenclature. Although there are no formal grounds for preferring conservation of one family-group name over the other, in view of the following facts, we request that the anthozoan name be conserved:

(a) the anthozoan family name antedates that of copepods, and

(b) in the indices of volumes 46-60 of *Biological Abstracts* (1965–1975), the family-group name METRIDIIDAE is listed only once, that for the actinian; the genus *Metridia* is cited from 17 abstracted papers, and the genus *Metridium* from 38.

7. In altering the spelling of the copepod family-group name, we believe the elimination of one of the letters "i" preceding the ending "dae", or the alteration of the first "i" to "e" could be misconstrued as a spelling error. Therefore, we request that the copepod family-group name be emended as METRIDINIDAE. This spelling is not based on the genus-group name *Metridina,* proposed by Norman (1878, p. 251) "to avoid confusion with *Metridium*", which constitutes an unjustified emendation [ICZN Article 33a(ii)]. However, Norman's name remains available for use as a possible replacement name for *Metridia* should the latter be found invalid at some future time, another reason we favor this solution to the problem.

8. We therefore request that the Commission:
   (1) use its plenary powers to rule that the stem of the generic name *Metridia* Boeck, 1865 (Copepoda) for the purposes of Article 29 is METRIDIN-;
   (2) place the following generic names on the Official List of Generic Names in Zoology:
      (a) *Metridium* Blainville, 1824 (Anthozoa) (gender: neuter), type species by monotypy *Actinia dianthus* Ellis, 1768;
      (b) *Metridia* Boeck, 1865 (Copepoda) (gender: feminine), type species by subsequent designation by Sars, 1902, *Metridia armata* Boeck, 1865; 1865;
   (3) place the following specific names on the Official List of Specific Names in Zoology:
      (a) *senilis* Linnaeus, 1761, as published in the binomen *Priapus senilis* (specific name of the senior subjective synonym of *Actinia dianthus* Ellis, the type species of *Metridium* Blainville, 1824);
      (b) *longus* Lubbock, 1854, as published in the binomen *Calanus longus* (specific name of the senior subjective synonym of *Metridia armata* Boeck, the type species of *Metridia* Boeck, 1856);
   (4) place the following family-group names on the Official List of Family-Group Names in Zoology:
      (a) METRIDIIDAE Carlgren, 1893 (type genus *Metridium* Blainville, 1824) (Anthozoa);
      (b) METRIDINIDAE Sars, 1902 (type genus *Metridia* Boeck, 1865) (Copepoda);
   (5) place the following family-group name on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
      (a) METRIDIIDAE Sars, 1902 (type genus *Metridia* Boeck, 1865) (Copepoda).

ACKNOWLEDGEMENT

D.F. Dunn wishes to thank Barry Roth and Lillian Dempster for their considerable help in the preparation of this appeal.

LITERATURE CITED

BLAINVILLE, M. de, 1824. *Dictionnaire des Sciences Naturelles*, vol. 30 (Mell-Mez). F.G. Levrault, ed. Paris, 485 pp.

———1830. *Dictionnaire des Sciences Naturelles*, vol. 60. F.G. Levrault, ed.

Strasbourg and Paris, 631 pp.

BLAINVILLE, M.D. de 1834. *Manuel d'Actinologie ou de Zoophytologie.* Levrault, Strasbourg, 644 pp.

BOECK, A., 1865. Oversigt over de ved Norges Kyster iagttagne Copepoder henhørende til Calanidernes, Cyclopidernes og Harpactidernes Familier. *Forh. Videnskabs-Selsk. Christiania* for 1864: 226–281.

CARLGREN, O., 1893. Studien über nordische Actinien. I. *K. svenska Vetenskapsakad. Handl.*, vol. 25 (10): 1–148.

_____ 1949. A survey of the Ptychodactiaria, Corallimorpharia and Actiniaria. *K. svenska Vetenskapsakad. Handl.* (4) vol. 1 (1): 1–121.

EHRENBERG, C.G., 1834, Beiträge zur physiologischen Kenntniss der Corallenthiere im allgemeinen, und besonders des rothen Meeres, nebst einem Versuche zur physiologischen Systematik derselben. *Abh. k. Akad. Wissen. Berlin*, vol. 1: 225–380.

ELLIS, J., 1768. An account of the Actinia Societa, or clustered animal-flower, lately found on the sea-coasts of the new-ceded islands. *Phil. Trans. roy. Soc. London*, vol. 57: 428–437.

GIESBRECHT, W., 1892. Systematik und Faunistik der pelagischen Copepoden des Golfes von Neapel und der angrenzenden Meeresabschnitte. *Fauna Flora Neapel*, vol. 19: 1–831.

_____ & SCHMEIL, O., 1898. Copepoda. II. Gymnoplea. *Tierreich*, vol. 6: 1–169.

GOSSE, P.H. 1860. *A History of the British Sea-anemones and Corals.* Van Voorst, London, 362 pp.

HAND, C., 1956. The sea anemones of central California, part III. The acontiarian anemones. *Wasmann J. Biol.*, vol. 13 (for 1955): 189–251.

LINNAEUS, C., 1761. *Fauna svecica*, 2nd ed. Laur. Salvii, Holmiae, [x1vi], 578 pp.

LUBBOCK, J., 1854. On some Arctic species of Calanidae. *Ann. Mag. nat. Hist*, ser. 2, vol. 14: 125–129.

NORMAN, A.M., 1878. Notes on the oceanic Copepoda. In: *Narrative of a Voyage to the Polar Sea During 1875-6 in H.M. Ships "Alert" and "Discovery".* H.W. Feilden, ed. Vol. 2: 249–253.

OKEN, L., 1815. *Lehrbuch der Naturgeschichte* part 3, section 1. Reclam, Leipzig.

RIEMANN-ZÜRNECK, K., 1975. Actiniaria des Südwestatlantik II. Sagartiidae und Metridiidae. *Helgo. wiss. Meeres*, vol. 27: 70–95.

SARS, G.O., 1902. *An account of the Crustacea of Norway*, vol. 4, parts IX and X: 97–120.

SEWELL, R.B.S., 1932. The Copepoda of Indian seas. *Mem. Ind. Mus.*, vol. 10: 223–407.

STEPHENSON, T.A., 1920. On the classification of Actiniaria. Part I. Forms with acontia and forms with a mesogloeal sphincter. *Quart. J. micros. Sci.*, n. s. vol. 64: 425–574.

_____ 1935. *The British Sea Anemones* vol. II. Ray Society, London, 426 pp.

WOLFENDEN, R.N., 1905. *Plankton Studies.* Part 1. Copepoda. Rebman, London and New York, 24 pp.

GNATHODUS PANDER, 1856 (CONODONTA): PROPOSED DESIGNATION OF A TYPE SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 2279.

By H. Richard Lane *(Research Center, Amoco Production Company, Tulsa Oklahoma, U.S.A.)* and Willi Ziegler *(Geolog.-paläontologisches Institut, Marburg, Germany)*

Pander (1856: 33, 34) described the conodont genus *Gnathodus* for forms:

"In den Mergeln der untersten Schichten des Bergalks im Tulaschen und der höheren des Moskauschen Gouvernements kommen wohlerhaltene kieferartige Ueberreste vor, die sich durch ihre Gestalt und die Beschaffenheit ihrer Basis von den bis jetzt beschriebenen unterscheiden, durch die microscopische Structur aber sich eng an sie anschliessen. Auf einer hohen, aus doppelten Wänden bestehenden, schmalen Platte, erheben sich, in einer Reihe, kleine Zähnchen und geben dieser das Ansehen, als wenn sie von einem gezähnten Rande begrenzt werde. Nach unten gehen diese Platten auf der einen Seite stark auseinander und bilden eine Höhle, während sie auf der entgegengesetzten noch aneinander bleiben. Diese Höhle, welche die Pulphöhle darstellt, verlängert sich seitwärts hinein und giebt, wie zu vermuthen ist, für jedes Zähnchen einen hinaufsteigenden Fortsatz ab."

2. The type species, by monotypy, is *Gnathodus mosquensis.* Pander (1856, pl. 2A, fig. 10, a,b,c) figured one view each of three specimens of the species. He also illustrated a close-up drawing of the microstructure of a broken piece of a free blade that presumably also derived from *G. mosquensis.* Pander (1856: 83) stated that these specimens came from the Mountain Limestone (Bergkalk) in "Moskau, hinter der Dragomilowschen Sastawa". A holotype of the species was not designated and no lectotype has subsequently been selected. All of the types are now lost and, to our knowledge, no specialist has ever had the opportunity to study them. A thorough search for the type material in the cities where Pander lived – Leningrad, Kazan and Moscow – was undertaken by S.P. Sergeeva, W.C. Khalymbadzha, I.S. Barskov, A.S. Alekseev and N.V. Goreva, but this was unsuccessful. It is not clear to us that the material was ever deposited in a museum.

3. That Pander (1856) illustrated only one view of each of the types suggests to us that he himself had only one view of each specimen available. We think it likely that the primary types were

embedded in stone in such a way that only one view was available for study. This was common practice among conodont specialists in the last century and the beginning of the current one, as techniques for extracting conodonts intact from stone had not yet been developed. All modern specialists agree that adequate study of conodonts necessitates the viewing of all aspects of the specimen. In the case of Pander's illustrated specimens, pl.2A, figs. 10, 10a, only lateral views are shown and in the case of fig. 10b, only a lower view is available. In the genera *Streptognathodus* Stauffer & Plummer, 1932, *Idiognathodus* Gunnell, 1931, *Idiognathoides* Harris & Hollingsworth, 1933, *Neognathodus* Dunn, 1970 and *Declinognathodus* Dunn, 1966, it is imperative to study the upper surface in order to make a positive identification and to distinguish them from *Gnathodus*. Knowledge of the shape of the basal cavity (lower surface) limits identification only to the Family GNATHODIDAE and a lateral view can be easily confused with representatives of the Family POLYGNATHIDAE. Thus, the important view for unequivocal identification of *Gnathodus* was not originally illustrated by its author and may not have been available in the original type material.

4. Since Pander's (1856) original description, *Gnathodus* has always been thought to be dominantly Lower Carboniferous in age. This is probably because he stated that it came from the Mountain Limestone, a stratigraphic unit that is Lower Carboniferous in age in its type area in Great Britain. As such, forms having a large posteriorly set basal cavity and a free blade that continues as a median carina to the posterior end of the platform, have been assigned to the genus at least since the study of Roundy (*in* Roundy, Girty & Goldman, 1926). However, early Upper Carboniferous forms now assigned to *Neognathodus* Dunn, 1970, and in some cases *Idiognathoides* Harris & Hollingsworth, 1933 and *Declinognathodus* Dunn, 1966, have formerly been assigned to *Gnathodus*. No less than 1,000 references to this Lower and early Upper Carboniferous concept of the genus *Gnathodus* have been made in the literature and over 80 species have been described. Thus, even though the true identity of the type specimens of *Gnathodus* has never been known, the genus has taken on a definite meaning for a globally distributed group of conodonts in Lower and early Upper Carboniferous rocks.

5. Recently, Barskov, Alekseev & Goreva (1977) stated that the type locality is no longer extant. For unspecified reasons, they determined the original horizon from which the type material came to be the Dorogomilaer Horizon within the Dorogomilaer beds of Kasimovian age (late Upper Carboniferous). If this is correct, then the type collection is of late Upper Carboniferous age and almost

certainly not a species belonging in the traditional concept of *Gnathodus*. These authors examined old samples in the collections of the Palaeontological Institute of the Academy of Sciences of the U.S.S.R. that they stated came from the collecting locality of the type [by type, we assume they mean the type species of the genus]. But these old samples were vugular dolomites that did not yield any conodonts. Pander (1856: 33) stated that the original type material came from marls, a significantly different lithology from a vugular dolomite. Thus, the true affinities of the type species of *Gnathodus* will never be known, nor is it possible to establish a neotype from topotypic material. However, Barskov, Alekseev & Goreva (1977) concluded, on the assumption that their determination of the type horizon is correct, that *G. mosquensis* is probably a representative of one of the Upper Carboniferous genera *Streptognathodus* Stauffer & Plummer or *Idiognathodus* Gunnell. They recovered *Streptognathodus cancellosus* Gunnell, 1931, and *S. oppletus* Ellison, 1941, from beds below, above and within the Dorogomilaer Horizon. However, they stated that *Streptognathodus excelsus* Stauffer & Plummer, 1932, was not found within the Dorogomilaer Horizon, but is known from both older and younger beds. Thus, they concluded:

(a) because of the impossibility at this time to find the type material of *G. mosquensis,* the species must be treated as a *nomen dubium:*

(b) it is not yet possible to know the proper affinities of *G. mosquensis.* If in the future it becomes necessary to synonymize the genera *Idiognathodus* and *Streptognathodus,* then the name *Gnathodus* must be used in order not to create nomenclatural conflict:

(c) in the Lower Carboniferous, species traditionally assigned to *Gnathodus* should in the future be placed in the genus *Dryphenotus* Cooper, 1939, the next younger Lower Carboniferous name that had been previously treated as a junior synonym of *Gnathodus.*

6. These facts and conclusions were informally presented to the participants of the VIII International Carboniferous Congress in Moscow in 1975 by A.S. Alekseev. Later, based on this informal presentation, Kozur & Mostler (1976) and Kozur & Mock (1977) synonymized *Streptognathodus cancellosus* with *G. mosquensis* and stated that the generic name *Gnathodus* should be used only for Upper Carboniferous forms. It is, of course, impossible for the latter authors to be certain of this conclusion because the original type material is not extant and Pander's illustrations do not show the critical features necessary to support such a synonymy.

7. We agree with Barskov, Alekseev & Goreva (1977) that *Gnathodus mosquensis* should be treated as a *nomen dubium* and that the actions of Kozur & Mostler (1976) and Kozur & Mock (1977) in synonymizing *S. cancellosus* with *G. mosquensis* are unwarranted. However, we do not agree with their suggestion that the name *Gnathodus* should be used for forms previously assigned to *Streptognathodus* and/or *Idiognathodus.* The fact remains that the primary types of *Gnathodus mosquensis* are irretrievably lost. The possibility of establishing a neotype is frustrated by the fact that the affinities of the original type material, as well as the site of the original type horizon and locality, cannot be reconstructed. Therefore, we cannot accept changing the long-established concept of this important genus based on circumstantial evidence.

8. We believe that in the interest of nomenclatural stability, the name *Gnathodus* must be preserved in the sense it has always retained since Pander's (1856) original description: it is nomenclatural stability, not only in the palaeontological literature that is at stake, but also in stratigraphic literature. In the biostratigraphic zonation of the British Avonian (Lower Carboniferous) by Rhodes, Austin & Druce (1969, fig. 12) the generic name *Gnathodus* is used no less than five times in the major subdivisions. In the case of the North American Mississippian zonation by Collinson, Rexroad & Thompson (1971, table 1), the name *Gnathodus* is used eight times in the major subdivisions. These zonal names have been employed repeatedly in the literature since their original definitions. If *Gnathodus* is removed from its traditional concept, then it will also necessitate zonal name changes that are now well established in the stratigraphic literature.

9. *Gnathodus texanus* Roundy represents the next oldest named species of *Gnathodus* conforming with the long-employed concept of the genus. The type specimen of this species, which is here proposed to be designated as type species of *Gnathodus,* is a free specimen that is still available in the collections of the United States National Museum in Washington, D.C. and we recently have had the opportunity to examine it. The geographic and stratigraphic particulars of its type horizon in the Barnett Shale of central Texas are clearly stated by Roundy (*in* Roundy, Girty & Goldman, 1926: 17, Locality 2688).

10. Because the type collection is irretrievably lost; because the affinities of the original type specimen will never with certainty be established; because the original type horizon and outcrop as inferred by Barskov, Alekseev & Goreva (1977) is no longer available and because the genus *Gnathodus* has always been

employed for a group of conodonts occurring only in Lower and early Upper Carboniferous rocks, we ask the International Commission on Zoological Nomenclature:

(1) to exercise its plenary powers to set aside all designations of type species hitherto made for the nominal genus *Gnathodus* Pander, 1856, and having done so, to designate *Gnathodus texanus* Roundy, 1926, to be the type species of that genus;

(2) to place the generic name *Gnathodus* Pander, 1856 (gender: masculine), type species by designation under the plenary powers in (1) above, *Gnathodus texanus* Roundy, 1926, on the Official List of Generic Names in Zoology;

(3) to place the specific name *texanus* Roundy, 1926, as published in the binomen *Gnathodus texanus* (specific name of type species of *Gnathodus* Pander, 1856), on the Official List of Specific Names in Zoology.

LITERATURE CITED

BARSKOV, I.S., ALEKSEEV, A.S. & GOREVA, N.V. 1977. Taxonomic and nomenclatural status of the conodont genus *Gnathodus* Pander, 1856. *Paleont. Zhurn.*, 1977: 131-134. [In Russian.]

COLLINSON C., REXROAD, C.B. & THOMPSON, T.L. 1971. Conodont zonation of the North American Mississippian, *in* Sweet, W.C. & Bergström, S.M., (eds.), Symposium on Conodont Biostratigraphy. *Geol. Soc. America Mem.* No. 127: 353-394.

COOPER, C.L. 1939. Conodonts from a Bushberg-Hannibal horizon in Oklahoma: *J. Paleont.*, vol. 13: 329-422.

DUNN, D.L. 1966. New Pennsylvanian platform conodonts from south western United States. *J. Paleont.*, vol. 40: 1294-1303.

——— 1970. Middle Carboniferous conodonts from western United States and phylogeny of the platform group. *J. Paleont.*, vol. 44: 312-342.

ELLISON, S. 1941. Revision of the Pennsylvanian conodonts: *J. Paleont.*, vol. 15: 107-143.

GUNNELL, F.H. 1931. Conodonts from the Fort Scott Limestone of Missouri. *J. Paleont.*, vol. 5: 244-252.

HARRIS, R.W. & HOLLINGSWORTH, R.V. 1933. New Pennsylvanian conodonts from Oklahoma. *Amer. J. Sci.*, vol. 25: 193-204.

KOZUR, H. & MOCK, R. 1977. On the age of the Palaeozoic of the Uppony Mountains (north Hungary). *Acta Miner.-Petrogr.*, Szeged, vol. 23: 91-107.

KOZUR, H. & MOSTLER, H. 1976. Neue Conodonten aus dem Jungpaläozoikum und der Trias. *Geol. Palaont. Mitt. Innsbruck*, vol. 6: 1-33.

PANDER, C.H. 1856. Monographie der fossilen Fische des Silurischen Systems der Russisch-Baltischen Gouvernements. *Kaiserl. Akad. Wiss.*: 1-91.

RHODES, F.H.T., AUSTIN, R.L. & DRUCE, E.C. 1969. British Avonian (Carboniferous) conodont faunas, and their value in local and intercontinental correlation. *Bull. brit. Mus. (nat. Hist.)* Geol., vol. 5: 1-313.

ROUNDY, P.V. 1926. Part II. The Micro-fauna, *in* Roundy, P.V., Girty, G.H. & Goldman, M.I., Mississippian formations of San Saba County: Texas. *U.S. Geol. Surv. Prof. Paper* 146: 5-23.

STAUFFER, C.R. & PLUMMER, H.J. 1932. Texas Pennsylvanian conodonts and their strategic relations. *Texas Univ. Bull.* 3201: 13-50.

REPORT ON THE GENERIC NAMES *ERIOPHYES* SIEBOLD, 1851, AND *PHYTOPTUS* DUJARDIN, 1851 (ACARINA) Z.N.(S.) 2044

by the Secretary, International Commission on Zoological Nomenclature

The present case started with an application by Dr V.G. Shevtchenko *(All-Union Entomological Society, USSR) (Bull. zool. Nom.* vol. 30: 196–197) for the use of the plenary powers to designate *Phytoptus vitis* Pagenstecher, 1857, as type species of *Eriophyes* Siebold, 1851, and *Phytoptus avellanae* Nalepa, 1899, as type species of *Phytoptus.* The application was supported by Dr Evert E. Lindquist *(Biosystematics Research Institute, Ottawa, Canada)* and 11 other zoologists from the USSR, Poland, India, New Zealand and South Africa. It was opposed by Mr Richard Newkirk *(U.S. Environmental Protection Agency, Washington, D.C.)* and Dr H.H. Keifer *(Sacramento, California)* who were supported by five other zoologists, all from the U.S.A.

The Commission voted on the case in Voting Paper (1977) 14 from 1 July to 1 October 1977. At the close of that period, there were 18 votes in favour of Dr Shevtchenko's proposal and three against. Four voting papers were not returned. In returning his voting paper, Dr Sabrosky remarked: "Mr Newkirk tells me that there are several synonyms senior to *avellanae,* and we should consider those before placing *avellanae* on the Official List". In fact, the Commission must either suppress those senior synonyms, or rule that *Phytoptus avellanae* Nalepa, 1899, is to be given precedence over them. On 30 December 1977 I received from Dr Sabrosky a copy of a letter from Mr Newkirk listing the synonyms in question:

Acarus pseudogallarum Vallot, 1836, *Mém. Acad. Sci. Arts, belles Lettres Dijon* (1836): 189. Available name.

Calycophthora avellanae Amerling, 1862, *Sitzungsber. k. böhm. Ges. Wiss.* (1862): 96. *Nomen nudum.*

Calycophthora avellanae Amerling, 1863, in Kirchner, *Lotus* (1863): 44. *Nomen nudum.*

Phytoptus coryli Frauenfeld, 1865, *Verh. zool.-bot. Ges. Wien,* vol. 15: 263. Available name.

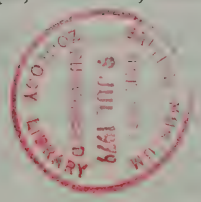
Phytoptus coryligallarum Targioni-Tozzetti, ?1885–1886, *Atti Accad. Georg. Firenze,* (4) vol. 8: 144, pl. 2, figs. 2, 8. Original not seen, but name presumably available from illustrations, if no stronger reasons. Sunk as synonym of *P.*

pseudogallarum (Vallot, 1836) by Targioni-Tozzetti, 1888, *Ann. Agricolt.* (1888), Relazione, parte istorica: 248–9.
Calycophthora avellanae "Amerling" [*sic*], Sorauer, 1886, *Handb. Pflanzenkr.*, ed. 2, vol. 1: 827. Available name.

Of the six names listed above, all but the second and third must be considered by the Commission. I cannot speak for *Phytoptus coryligallarum* Targioni-Tozzetti, ?1885–1886, not having seen the original, but all the others are based on descriptions of either the galls or the activity of the mites. It is no doubt for that reason that none of the names has been used as a valid name (so far as I am aware) in recent times, because acarologists tend to ignore names based on galls or on other aspects of the work of the mites in favour of names connected with descriptions of the mites themselves.

The Commission is therefore invited, first, to vote for or against using its plenary powers in this case and then, either (a) to suppress the four available names listed above for the purposes of the Law of Priority but not for those of the Law of Homonymy and place them on the Official Index of Rejected and Invalid Specific Names in Zoology, or (b) to rule that none of them is to be given nomenclatural precedence over *Phytoptus avellanae* Nalepa, 1899, whenever it is regarded as a synonym of the latter, and to place them, with suitable endorsements, on the Official List of Specific Names in Zoology.

Since the above was written, Mr Newkirk has kindly sent me, among other papers, a photocopy of the following work, which clearly relates to Item 5 of the list of senior synonyms of *Phytoptus avellanae* given above: "Di alcuni rapporti delle coltivazioni cogli insetti e di due casi di infezioni del nocciolo e dell'olivo per cagione di insetti. *Memoria* del Prof. Ad. Targioni-Tozzetti letta alla R. Accademia dei Georgofili il 1° marzo 1885." The work, which is dated "1885" includes an appendix entitled "Insetti e Acari concomitanti nelle galle delle gemme del nocciòlo". This is paginated from 27 to 38; on: 32 are comparative dimensions of *Phytoptus coryligallarum* and two other species. There are two plates headed "Atti R. Acc. dei Georg. Ser. 4, vol. 8", and pl. 2, figs. 2, 8 illustrate *Phytoptus coryligallarum* (the mite, not the gall). This unused name is thus clearly available as a senior synonym of *P. avellanae*. Nalepa, 1898: 9, refers to this work as "(descr. nulla, fig. insuff.)".



Readers of the Bulletin are reminded that the only regular source of income to finance the work of the Commission comes from sales of this periodical, and that this is insufficient to meet the needs of zoologists for the services provided by the Commission and to maintain the office at an efficient level. Help in the form of donations and bequests will, therefore, be received with gratitude.

The International Trust for Zoological Nomenclature wishes to express its appreciation of the facilities provided by the Trustees of the British Museum (Natural History) for the Secretariat of the Commission.

© 1979 THE INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
Printed in England by INPRINT OF LUTON (Designers & Printers) LTD.

Volume 36, Part 2
pp. 65 - 134

ISSN 0007 - 5167
1st August 1979

NAT. HIST. MUSEUM
15 AUG 1979
ZOOLOGY LIBRARY

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

CONTENTS

Page

Notice prescribed by the International Congress of Zoology:
a. List of new applications 65
Special Announcement: N.D. Riley 65

International Code of Zoological Nomenclature

The International Code of Zoological Nomenclature: result of vote on proposals for substantive amendments (first instalment) (The Secretary) 66
Proposed addition to the species group of names for taxa differentiated by geographical criteria (G. Bernardi & R.V. Melville) . . 71

(Contents continued on page vii)

LONDON

International Trust for Zoological Nomenclature
c/o British Museum (Natural History)
Cromwell Road, London, SW7 5BD

Price £6.25

(All rights reserved)

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

A. The Officers of the Commission

President: Dr. C.W. SABROSKY *(Systematic Entomology Lab., USDA c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.).*

Vice-President: Prof. Per BRINCK *(Ecology Building, University of Lund, S-223 62, Lund, Sweden).*

Secretary: Mr. R.V. MELVILLE *(British Museum (Natural History), Cromwell Road, London SW7 5BD).*

Assistant Secretary: Dr. I.W.B. NYE *(British Museum (Natural History), Cromwell Road, London SW7 5BD).*

B. The Members of the Commission

(Arranged in order of election or of most recent re-election)

Dr. Eugene EISENMANN *(American Museum of Natural History, New York, New York 10024, U.S.A.)* (30 January 1968) **Ornithology**

Mr. R.V. MELVILLE *(British Museum (Natural History), Cromwell Road, London SW7 5BD)* (30 January 1968) *(Secretary)* **Palaeontology**

Dr. Y.I. STAROBOGATOV *(Zoological Institute, Academy of Sciences, Leningrad B-164, U.S.S.R.)* (30 January 1968) **Mollusca, Crustacea**

Dr. F.M. BAYER *(U.S. National Museum, Washington, D.C. 20560, U.S.A.)* (20 February 1972) **Octocorallia; Systematics**

Prof. John O. CORLISS *(University of Maryland, College Park, Maryland 20742, U.S.A.)* (20 February 1972) **Protozoa; Systematics**

Prof. T. HABE *(National Science Museum, 3-23-1 Hyakunin-cho, Shinjuku-ku, Tokyo 160, Japan)* (20 February 1972) **Marine Biology**

Mr. David HEPPELL *(Department of Natural History, Royal Scottish Museum, Edinburgh EH1 1JF, Scotland)* (20 February 1972) *(Councillor)* **Mollusca**

Dr. I.W.B. NYE *(British Museum (Natural History), Cromwell Road, London SW7 5BD)* (20 February 1972) *(Assistant Secretary)* **Lepidoptera**

Prof. A. WILLINK *(Universidad Nacional de Tucumán, Instituto Miguel Lillo, Miguel Lillo 205, 4000 Tucumán, Argentina)* (20 February 1972) **Neotropical Hymenoptera**

Prof. Enrico TORTONESE *(Istituto Zooprofilattico, Lungo Bisagno Dalmazia 45A, 16141, Genova, Italy)* (30 September, 1972) **Pisces; Echinodermata**

Prof. Per BRINCK *(Ecology Building, University of Lund, S-223 62, Lund, Sweden)* (30 September 1972) *(Vice-President)* **Arthropoda; Ecology**

Prof. Dr. Raphael ALVARADO *(Departamento de Zoologia, Facultad de Ciencias, Universidad de Madrid, Madrid 3, Spain)* (30 September 1972) **Echinoidea; Asteroidea**

Prof. E. BINDER *(Muséum d'Histoire Naturelle, CH 1211 Geneva 6, Switzerland)* (30 September 1972) **Mollusca**

Prof. Harold E. VOKES *(University of Tulane, Department of Geology, New Orleans, Louisiana 70118, U.S.A.)* (30 September 1972) **Mollusca**

Dr. L.B. HOLTHUIS *(Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands)* (30 September 1972) *(Councillor)* **Crustacea**

Dr. G. BERNARDI *(Muséum National d'Histoire Naturelle, 45 bis rue de Buffon, 75005, Paris, France)* (30 September 1972) **Lepidoptera**

Dr. C. DUPUIS *(Muséum National d'Histoire Naturelle, 57 rue Cuvier, 75231, Paris, Cedex 05 France)* (30 September 1972) **Heteroptera**

Dr. M. MROCZKOWSKI *(Instytut Zoologiczny, Polska Akademia Nauk, Warsaw, Poland)* (14 March 1975) **Coleoptera**

Prof. H.E. WELCH *(Department of Zoology, University of Manitoba, Winnipeg, Manitoba, R3T 2N2 Canada)* (17 March 1976) **Nematoda**

Prof. Dr. Otto KRAUS *(Zoologisches Institut und Zoologisches Museum, 2000 Hamburg 13, Germany)* (29 September 1976) **Arachnida, Myriapoda**

Dr. W.D.L. RIDE *(Department of Science and the Environment Central Office, Scarborough House, Phillip, P.O. Box 449, Woden, A.C.T. 2606, Australia)* (29 September 1976) *(Councillor)* **Mammalia; Recent and Fossil**

Dr. Curtis W. SABROSKY *(Systematic Entomology Lab., USDA c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.)* (29 September 1976) *(President)* **Diptera**

Dr. H.G. COGGER *(Australian Museum, Sydney 2000, N.S.W. Australia)* (29 September 1976) **Reptilia; E D P Methods**

Prof. Dr. Gerhard HAHN *(Fachbereich Geowissenschaften, Universitätsgebiet Lahnberge, 3550 Marburg, BRD)* (27 December 1978) **Palaeontology**

Prof. Dr. O. HALVORSEN *(Institute of Biology and Geology, University of Tromsö, P.O. Box 790, N-9001 Tromsö, Norway)* (27 December 1978) **Parasitology**

Dr. V.A. TRJAPITZIN, *(Zoological Institute, Academy of Sciences, Leningrad B-164, USSR)* (27 December 1978) **Entomology**

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE

A. The Members of the Trust

Sir Peter E. Kent, F.R.S. *(Chairman)*
Dr. F.G.W. Jones *(Secretary and Managing Director)*
Prof. D. Curry, F.G.S.
Sir Arthur Drew, K.C.B.
Mon. J. Forest
Col. Francis J. Griffin, O.B.E.
Dr. R.H. Hedley
Dr. N.E. Hickin
Dr. L.B. Holthuis
Prof. Dr. O. Kraus
Prof. O.W. Richards, F.R.S.
Sir Eric Smith, F.R.S.
Mr. C.W. Wright, C.B.
Dr. G.F. deWitte

B. The Officers of the Trust

Mr. R.V. Melville, M.Sc. *(Scientific Controller)*
Mr. R.J.A. Lever *(Assistant Zoologist)*

CONTENTS
(continued from front cover)

Page

Opinions

Opinion 1128. *Platyrhacus* Koch, 1847 (Diplopoda): designation of *Platyrhacus fuscus* Koch, 1847 as type species 73
Opinion 1129. *Vulpes* Frisch, 1775 (Mammalia) conserved under the plenary powers 76
Opinion 1130. *Lilioceris* Reiter, 1912 (Insecta; Coleoptera): correction of type species 79
Opinion 1131. *Amphisbaena mildei* Peters, 1878 (Reptilia): suppressed under the plenary powers 82
Opinion 1132. Two works by Hemprich & Ehrenberg, 1828, suppressed under the plenary powers; *Heterotis* Rüppell, 1829, *ex* Ehrenberg MS (Pisces) validated under the plenary powers and placed on the Official List with *Arapaima* Müller, 1843 (Pisces) 85
Opinion 1133. Suppression under the plenary powers of names for genera and species of Amphipoda proposed by Rafinesque between 1814 and 1820 91
Opinion 1134. *Zerynthia* Ochsenheimer, 1816 (Insecta; Lepidoptera): conserved under the plenary powers 102
Opinion 1135. *Murex lotorium* Linnaeus, 1758 (Gastropoda); ruling on interpretation 105
Opinion 1136. *Cicadetta strepitans* Kirdaldy, 1909 (Insecta; Homoptera): conserved 107
Opinion 1137. *Aphis gossypii* Glover, 1877 (Insecta; Homoptera) validated under the plenary powers 109
Opinion 1138. *Giraffa camelopardalis australis* Rhoads, 1896 (Mammalia) suppressed 111
Opinion 1139. *Paraonis* Grube, 1873 (Polychaeta, PARAONIDAE): designation of a type species under the plenary powers . 114
Opinion 1140. *Sesarma rubripes* Rathbun, 1897 (Crustacea Decapoda) given precedence over *Sesarma trapezium* Dana, 1852, under the plenary powers 119
Opinion 1141. *Donacilla* Blainville, 1819 (Bivalvia) suppressed; *Donacilla* Philippi, 1836, *Mesodesma* Deshayes, 1832 and *Semele* Schumacher, 1817 (Bivalvia) added to the Official List 122
Opinion 1142. Family-group names based on *Platystoma* Meigen, 1803 given precedence over those based on *Achias* Fabricius, 1805 (Diptera) 125
Opinion 1143. *Kerrichiella* Rosanov, 1965 (Hymenoptera): designation of a type species under the plenary powers . 130
Opinion 1144. *Phloeotribus* (Coleoptera: SCOLYTIDAE) ruled to be a justified emendation of *Phloiotribus* Latreille, 1796 132

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 36, part 2 (pp. 65 - 134 1st August 1979

NOTICES

(a) *Receipt of new applications.* The following new applications have been received since the publication of vol. 36 (1) on 1st July 1979. None involves the application of Articles 23a-b and 79b.

(1) *Heteromastus* Eisig, 1887 and *Capitella filiformis* Claparède, 1864 (Polychaeta): proposed conservation. Z.N.(S.) 2304 (P. Hutchings & S. Rainer).

(2) *Agrostis redimicula* Morrison, 1875 (Lepidoptera): proposed validation. Z.N.(S.) 2305 (J.D. Lafontaine).

(3) *Heliothis* Ochsenheimer, 1816 (Lepidoptera): proposal to designate gender and stem. Z.N.(S.) 2306 (I.W.B. Nye).

(4) THAIDIDAE Jousseaume, 1888 (Gastropoda): proposed correction of entry No. 439 in Official List of Family-Group Names in Zoology. Z.N.(S.) 2307 (W.O. Cernohorsky).

N.D. RILEY

We announce, with deep regret, the death of N.D. Riley, formerly Secretary to the Commission. An obituary will be published in the *Bulletin* as soon as possible.

c/o British Museum (Natural History)
Cromwell Road
London SW7 5BD
United Kingdom

R.V. MELVILLE
Secretary, International Commission on Zoological Nomenclature
July 1979

THE INTERNATIONAL CODE OF ZOOLOGICAL NOMENCLATURE: RESULT OF VOTE ON PROPOSALS FOR SUBSTANTIVE AMENDMENTS (FIRST INSTALMENT). Z.N.(G.) 182

By the Secretary, International Commission on Zoological Nomenclature

In November 1977, the Editorial Committee appointed to prepare the Third Edition of the International Code of Zoological Nomenclature published a first instalment of its proposals for substantive amendments to the Code and Constitution in *Bull. zool. Nom.* vol. 34: 167–175. This paper appeared at the same time as the committee's sixth draft of the Third Edition was published and available for comment. Notices of the publication of this paper and of the Sixth Draft were sent to a number of scientific journals.

2. The Editorial Committee's paper contained 25 proposals for the amendment of the Code and Constitution of the Commission. Under Article 16 of the Constitution, the Commission could not vote on these proposals until a year after their publication. When the time came to submit them for a vote, the Editorial Committee took the view that its consideration of eight of the proposals was not sufficiently advanced for a vote to be taken on them, and that one proposal should be withdrawn. One proposal was divided into two parts, so that seventeen points were presented for voting.

3. In Voting Paper (79)1 issued under the Three-Month Rule on 14 March 1979, all 25 points were listed and the members of the Commission were invited to vote for or against the principle of each, without commitment to a particular form of words. At the close of the voting period on 14 June the state of the voting was as follows:

	For	Against
(1) Should the Glossary form part of the Code?	18	0
(2) Should the term "epithet" replace the term "specific name"?	RESERVED	
(3) Criteria of publication	RESERVED	
(4) Definition of an available compound epithet	16	1
(5) Should a single combined description of a new genus and a new species continue to make both names available after 1930 (as it already does for names published before 1931)?	18	0

(6)	Extension of acceptance of bibliographic references as indications	16	2
(7)	Should the mandatory provision that a comma be inserted between author and date (when cited) be reduced to a Recommendation?	13	5
(8)	Greek (etc.) epithets to be indeclinable	RESERVED	
(9)	Deletion of Article 29d adopted at Monaco (see *Bull. zool. Nom.* vol. 31: 80, 81)	13	2
(10)	Refined differentiation between different kinds of subsequent spelling	16	1
(11)	Correction of diacritic marks	RESERVED	
(12)	Use of *"-i"* and *"-ii"* as permissible alternatives	RESERVED	
(13)	Homonymy between names of type genera	17	1
(14)	(a) Authorship of names published in synonymy	17	0
	(b) Types of taxa denoted by names published in synonymy	15	2
(15)	Status of the fourth term in quadrinominals	16	1
(16)	Proposed additions to Article 58	17	1
(17)	Suggestion that "generitype" be adopted in place of type species	WITHDRAWN	
(18)	Deletion of Code Article 67e concerning objective synonymy of the name of a type species	17	1
(19)	Status of single surviving specimen when it is not known whether the species-group taxon was based on one specimen or more than one	RESERVED	
(20)	Multiple type specimens in Protozoa	RESERVED	
(21)	Use of term "type of a name" or "type of a nominal taxon"?	RESERVED	
(22)	Enlargement of number of members of Council	16	2
(23)	Secretary to Commission to be secretary to Council	17	1
(24)	Term of office of Secretary	18	0
(25)	Removal of requirement to publish (other than in *Bull. zool. Nom.*) notices of proposals for amendment of the Constitution	16	1

Voting papers were not returned by the following members of the Commission: Bayer, Eisenmann, Habe, Kraus, Tortonese, Welch, Trjapitzin. Brinck was on leave of absence.

Holthuis abstained on point 4; Dupuis on 9, 10 and 15; Cogger on 9; Binder on 9 and 14a; and Starobogatov on point 25.

The following comments were sent in by members of the Commission with their voting papers:

Dupuis: "Point 7: "A mon avis, aucune ponctuation n'est nécessaire entre le nom d'auteur et la date.

"Point 9: A mon avis, la priorité des auteurs et dates des noms en question doit être sauvegardée, quelle que soit la correction orthographique qui s'impose.

"Point 15: For, si l'on précise 'outside the scope of the present Code.' Against, si 'excluded from zoological nomenclature.'

"Points 22, 23: Je ne suis pas favorable à la notion du Conseil. Je ne reconnais que des membres de la Commission égaux en droits et je souhaiterais simplement un bureau exécutif (executive committee).

"Point 25: La Commission, qui n'a plus un 'support' aussi large que du temps des congrès de zoologie, a tendance à se considérer comme autonome, omnipotente et autoreproductible. La disposition prévue accroîtrait encore ce repliement et ce secret autarciques que je considère comme dangereux."

Alvarado: "My vote against Point 7, and the votes for, are in accordance with the opinions of the Entomological Working Group of the Spanish Society of Natural History and other zoologists, and do not reflect only my personal opinions on these matters."

Ride: "Point 18: Article 67e. Providing that a designation made in contravention of the new provision would remain valid but the name of the type species should be correctly cited by subsequent authors."

Nye: "Point 18: Article 67e of the 1964 Code was a watered-down version of Declaration 21 and dealt with how the name of a type species (after fixation) should be cited in the special case of its being a junior objective synonym. Article 67e of the Sixth Draft of the third edition appears to extend this rule to cases where a type species, when fixed, is denoted by a junior subjective synonym.

"The explanation of the EC proposals on this point (*Bull. zool. Nom.* vol. 34: 172) is confusing and does not agree with the draft provision. Draft Article 67e gives mandatory force to only part of Recommendation 69C of 1964 (which has been deleted as such). There are in fact two points involved here, and they should be analysed separately:

(A) What is acceptable as a type-species fixation?

(B) How should a type species be cited after fixation?

"(A). What is acceptable as a type-species fixation is reasonably well defined in the 1964 Code and the Sixth Draft, except that it is not made clear whether one made by citing the name of the type species under an objective synonym is to be accepted as valid or not. For example, in the Lepidoptera, *Epicoma* Hübner, [1819], had an originally included nominal species *Epicoma tristis* Hübner, [1819], which is a junior secondary homonym of *Bombyx tristis* Donovan, 1805. A new replacement name, *Epicoma contristis,* was published by Hübner in 1823, and the species was cited under that name when it was fixed as type of the genus by Kirby, 1892. Is this fixation valid or not? Commonsense indicates that emendations, new replacement names and other objective synonyms, if denoting

the same type species with the same type specimen, should be regarded as different spellings or names for the same nominal taxon. However, in both the 1964 Code and the Sixth Draft, a genus-group name and its new replacement name are regarded as denoting different nominal taxa [Art. 67i], and this seems to me incorrect. The provision should be reworded to read 'both names denote the same nominal taxon'.

"The above concept could be incorporated into Article 69a (iv) as:

'(iv) If an author fixes (or accepts another's fixation) as type species, either

(1) a nominal species denoted by an objective synonym of the epithet under which it was originally included, or

(2) a nominal species that was not originally included, and if, but only if, at the same time he places that nominal species in synonymy with one of the originally included species, his act constitutes the designation of the originally included nominal species as the type species of the nominal genus-group taxon.'

"(B) I agree with what I think the EC is trying to say, that is that the type species should be cited under the same epithet (if available) that was used for it when it was originally included in the genus. Article 67e should be reduced to a Recommendation (Recommendation 67B) as:

'Citation of type species following fixation. – The name of a nominal species, type of a genus-group taxon, should be cited first by the original combination by which it was denoted when it was first included in that taxon, and secondly by its current valid combination if that is different.' "

Bernardi: "Point 15: 'For' avec réserves. Cette disposition était implicitement contenue dans la deuxième édition du Code et mal comprise par de nombreux zoologistes. Il était donc utile de l'exprimer clairement. Mais elle conduit à un chaos en ce qui concerne (1) les noms utilisés pour exprimer la variation géographique, et (2) les noms des auteurs de ces noms."

Hahn: "Point 16: I agree to add (3) and (4) to Art. 58. But do you think that (15) is indeed helpful? There are some names, now available, that would become homonyms if this provision were adopted. For example, in the genus *Brachymetopus* we have *B. ouralicus* (de Verneuil, 1845) and *B. strzeleckii uralicus* (V.N. Weber, 1937). The *'ou'* and *'u'* are not identical. But these names differ in spelling only from the use of different systems of transliteration. If clause (15) is added to Article 58, the younger name

will have to be replaced, so that the additional clause would not promote stability of nomenclature."

DECLARATION OF RESULT OF VOTE

The result of the vote on V.P. (79)1 is that all the points submitted for a vote received the two-thirds affirmative majority required under Article 16a(v) of the Constitution. The publication of this report therefore constitutes the corresponding recommendation by the Commission to the Congress that the proposed amendments be incorporated into the Code, in words to be prepared by the Editorial Committee for the Commission's approval.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
18 June 1979

PROPOSED ADDITION TO THE SPECIES GROUP OF NAMES FOR TAXA DIFFERENTIATED BY GEOGRAPHICAL CRITERIA. Z.N.(S.) 2302

By G. Bernardi *(Muséum National d'Histoire Naturelle, Paris)* and R.V. Melville *(Secretary, International Commission on Zoological Nomenclature)*

Many attempts have been made to introduce into species-group names supplementary epithets representing a certain analogy with subgeneric names already accepted in the Code. An exhaustive study of the various terms proposed for this purpose is to be published elsewhere by Bernardi in 1979. Here we attempt only to explain our proposal to add provisions to the Code to deal with such epithets.

2. The attempts referred to have arisen in studies of geographical variation and have been concerned mainly with (1) monophyletic groups of vicarious species (Artenkreis of Rensch, 1928; geogenus of Rensch, 1931; superspecies of Mayr, 1931; the species forming such groups have been termed "prospecies" by Birula, 1910, "hemispecies" by Mayr, 1940 and "allospecies" by Amadon, 1966); and (2) to groups of closely related subspecies within a species (Formengruppe of Laubmann, 1921; exerge of Verity, 1925; citrapsecies of Dujardin, 1956).

3. There are in fact many synonyms denoting each of these concepts, but the Code is not concerned with these. Article 45 of the Draft Third Edition of the Code accepts such terms as "subspecies" and "race" as equivalent from the nomenclatural point of view. The role of the Code is simply to lay down a rule for the incorporation into scientific names of the epithets representing these concepts. This is comparatively easy, for even if different modes of citation have been proposed independently by different authors, there are many common points between them. These common points are:

(1) the names at supra-specific level are always placed between the generic name and the specific epithet, and the names at supra-subspecific level between the specific and subspecific epithets;

(2) the epithet applied to the new (intermediate) category is always the oldest among those of the included species or subspecies, as the case may be.

The only variation in practice concerns an insignificant point: the use of parentheses (), or brackets [ ], or of neither around the name

of the intermediate taxon. This will be examined at length in due course by Bernardi (in press, 1979).

4. In our opinion, the use of parentheses is to be preferred (a) because it conforms to the traditional use of parentheses for subgeneric names in the Code, (b) because it corresponds to the usage of the majority of authors, and (c) because brackets have been used to denote other concepts than those considered here. Only Amadon – and then only in his works published since 1966 – has proposed the use of brackets around the names of vicarious species.

5. During meetings between us in Paris in April 1978 and in January and April 1979, we have examined this problem in depth and propose the following addition to Article 5 of the Draft Third Edition of the Code:

> "An epithet may be added in parentheses after the genus-group name, or be inserted in parentheses between the generic name and the specific epithet to represent a group of vicarious species; and an additional epithet may be placed in parentheses between the specific and subspecific epithets to represent a group of subspecies within a species; such epithets, which must always be printed with a lower-case initial letter, are not counted in the number of words in a binomen or trinomen.
>
> "Examples.– In the genus *Ornithoptera* Boisduval, 1832, the species *O. priamus* (Linnaeus, 1758) is the first-named member of a group of vicarious species that includes also *O. lydius* Felder, 1865 and *O. croesus* Wallace, 1865. The supra-specific rank accorded to *O. priamus* may be expressed in the notation *'Ornithoptera (priamus)* (Linnaeus, 1758)' and the relationship between the members of the group by the notations *'O. (priamus) priamus* (Linnaeus, 1758)', *'O. (priamus) lydius* Felder, 1865' and *'O. (priamus) croesus* Wallace, 1865'. In the species *Mellicta athalia* (Rottemburg, 1775) there are two groups of subspecies of which *M. athalia athalia* and *M. athalia celadussa* (Fruhstorfer, 1910) are respectively the first-named subspecies. The relationship between the subspecies in each of these groups may be expressed by the following notations:
> *'M. athalia (athalia) athalia* (Rottemburg, 1775)'; *'M. athalia (athalia) norvegica* (Aurivillius, 1888)'; and *'M. athalia (celadussa) celadussa* (Fruhstorfer, 1910)'; *'M. athalia (celadussa) nevadensis* (Ch. Oberthur, 1904)'."

OPINION 1128
PLATYRHACUS KOCH, 1847 (DIPLOPODA): DESIGNATION OF *PLATYRHACUS FUSCUS* KOCH, 1847, AS TYPE SPECIES

RULING – (1) Under the plenary powers, all designations of type species for the nominal genus *Platyrhacus* C.L. Koch, 1847 hitherto made are hereby set aside and the nominal species *Platyrhacus fuscus* C.L. Koch, 1847, is hereby designated as type species of that genus.

(2) The generic name *Platyrhacus* C.L. Koch, 1847 (gender, masculine), type species, by designation under the plenary powers in (1) above, *Platyrhacus fuscus* Koch, 1847, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2075.

(3) The specific name *fuscus* C.L. Koch, 1847, as published in the binomen *Platyrhacus fuscus* (specific name of type species of *Platyrhacus* C.L. Koch, 1847) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2666.

(4) The family name PLATYRHACIDAE Pocock, 1895 (type genus *Platyrhacus* C.L. Koch, 1847) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 495.

HISTORY OF THE CASE Z.N.(S.) 2078

An application for the use of the plenary powers to designate a type species for the nominal genus *Platyrhacus* C.K. Koch, 1847, was first received from Dr Richard L. Hoffman *(Radford College, Virginia, USA)* on 18 July 1974. It was sent to the printer on 27 August 1974 and published on 31 December 1974 in *Bull. zool. Nom.* vol. 31: 249–251. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to seven entomological serials.

The application was supported by Dr R.M. Shelley *(North Carolina State Museum of Natural History)* and by Dr H. Enghoff *(Universitetets Zoologiske Museum, Copenhagen, Denmark).* No adverse comment was received.

At the suggestion of the late Dr Lemche the "old and faded square paper label" mentioned in paragraph 7 of the application was examined under ultra-violet light. Dr K.H. Hyatt *(British Museum, Natural History),* who made the examination, reported

that the following was readable:

Platyrhacus
fuscus Kch.
Polydesmus Heros
Hglch.
Java

No light could be thrown on the meaning of the name *"Polydesmus Heros"* or of the abbreviation "Hglch."

DECISION OF THE COMMISSION

On 7 April 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)8 for or against the proposals set out in *Bull. zool. Nom.* vol. 31: 251. At the close of the voting period on 7 July 1978 the state of the voting was as follows:

Affirmative Votes – twenty (20) received in the following order: Melville, Holthuis, Eisenmann, Mroczkowski, Brinck, Vokes, Sabrosky, Cogger, Habe, Tortonese, Binder, Willink, Nye, Alvarado, Corliss, Starobogatov, Bernardi, Welch, Bayer, Ride

Negative Vote – Heppell.

No voting papers were returned by Dupuis and Kraus.

Mr Heppell commented as follows in returning his vote: "I do not believe the applicant had made out a sufficiently good case for the use of the plenary powers in the way proposed. I am not prepared to vote for the addition of *P. fuscus* Koch to the Official List without knowing more about the usage of that name. The applicant states that it 'appears to be very similar to, if not identical with, *Platyrhacus flavisternus* Pocock, a common Javan species' which name is, I presume, junior to *fuscus,* though no date is given. Is the name of this common species to be upset by recognition of *fuscus,* interpreted only by the presumed type? Or is the name *fuscus,* which seems to have been identifiable by a sufficiently good figure which agrees closely with the Koch specimen, also in general use? Only in the latter case would I think its addition to the Official List acceptable."

Dr Hoffman was invited to reply to this comment and did so as follows:

"So far as I can find out, *flavisternus* has been cited in the literature only four times since its original description in 1894. Of these, a mention in 1899 is possibly a misidentification, references in 1914 and 1938 are mere lists, and one in 1945 is a *bona fide* use as a valid name. I do not think that this amounts to general usage. I

said that the species was common on the basis of a verbal communication from a colleague who has made large collections of it, but who has not published on the species.

"On the other hand, *fuscus* has not been used since 1863 except in several lists of *species inquirendae,* but this is not uncommon in diplopod taxonomy. Plenty of well-described species, with extant types in the larger museums, have fallen into obscurity because the previous generation of milliped specialists just did not believe in either restudying types or trying very hard to match up old names with their material (better to name it all as new!)."

It is thus clear that the case presented by Dr Hoffman is not concerned with usage, but with the problem of the misidentification of the type species of *Platyrhacus* – a problem which, under Article 70 of the Code, he was obliged to submit to the Commission.

ORIGINAL REFERENCES

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

fuscus, Platyrhacus, C.L. Koch, 1847, *System der Myriapoden,* in Panzer & Herrich-Schaeffer, *Krit. Revis. Insectenfauna Deutschlands,* III Bändchen: 132

PLATYRHACIDAE Pocock, 1895, (as "PLATYRRHACIDAE"), *Ann. Mus. Civ. Stor. nat. Genova,* vol. 34: 788

Platyrhacus C.L. Koch, 1847; *System der Myriapoden,* in Panzer & Herrich-Schaeffer, *Krit. Revis. Insectenfauna Deutschlands,* III Bändchen: 131.

CERTIFICATE

I certify that the votes cast on voting paper (78)8 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1128.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
13 November 1978

OPINION 1129
VULPES FRISCH, 1775 (MAMMALIA) CONSERVED UNDER THE PLENARY POWERS

RULING – (1) Under the plenary powers it is hereby ruled

(a) that the generic name *Vulpes* Frisch, 1775 (a name published in a work placed on the Official Index of Rejected and Invalid Works in Zoological Nomenclature) is available for the purposes of zoological nomenclature;

(b) that all previous designations of type species for the nominal genus *Vulpes* Frisch, 1775, are set aside and *Canis vulpes* Linnaeus, 1758, is ruled to be the type species;

(c) that the specific names *minimus* and *saarensis* Skjöldebrand, 1777, as published in the combination *Vulpes minimus Saarensis*, are suppressed for the purposes of the Law of Priority, but not for those of the Law of Homonymy.

(2) The generic name *Vulpes* Frisch, 1775 (gender: feminine), type species, by designation under the plenary powers in (1) (b) above, *Canis vulpes* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2076.

(3) The specific name *vulpes* Linnaeus, 1758, as published in the binomen *Canis vulpes* (specific name of type species of *Vulpes* Frisch, 1775) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2667.

(4) The generic name *Vulpes* Skjöldebrand, 1777 (a junior homonym of *Vulpes* Frisch, 1775) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 2104.

(5) The species-group names *minimus* and *saarensis* Skjöldebrand, 1777, as published in the combination *Vulpes minimus Saarensis*, are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers 1049 and 1050 respectively.

HISTORY OF THE CASE Z.N.(S.) 977

The origins of the present case are obscure. It appears that in 1931 Dr Stiles (then Secretary to the Commission) prepared a list of generic names for inclusion in the Official List, and that this list

included "*Vulpes* Oken, 1816". (The list was of genera in species of which there had been found parasites common to Man.) The first formal proposal for the validation of *Vulpes* Frisch, 1775, was received on 29 November 1974 from Dr Juliet Clutton-Brock and Dr G.B. Corbet *(British Museum (Natural History), London).* This was sent to the printer on 5 March 1975 and was published on 22 September 1975 in *Bull. zool. Nom.* vol. 32: 110–112. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to two mammalogical serials. No comment was received.

DECISION OF THE COMMISSION

On 5 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper 1978 (10) for or against the proposals set out in *Bull. zool. Nom.* vol. 32: 111–112. At the close of the voting period on 5 December 1978 the state of the voting was as follows:

Affirmative Votes – eighteen (18), received in the following order: Holthuis, Melville, Alvarado, Mroczkowski, Eisenmann, Vokes, Brinck, Willink, Habe, Tortonese, Cogger, Binder, Bayer, Dupuis, Corliss, Nye, Welch, Bernardi

Negative Votes – none (0).

A late affirmative vote was received from Sabrosky. Ride was on leave of absence. No votes were returned by Kraus, Heppell and Starobogatov.

The following comments were sent in by members of the Commission with their voting papers:

Eisenmann: "Ordinarily I am disinclined to validate a name on the basis of an 'invalid' work merely to give that name priority in the event of generic merger. But *Vulpes* is such a well-known name that I feel an exception is justified, especially as no opposition has been filed by mammalogists."

Dupuis: "Les cas de *Dama* et de *Vulpes* montrent bien le danger de vouloir effacer l'histoire par le rejet d'un ourvrage."

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

minimus, Vulpes, Skjöldebrand, 1777, *K. svenska Vetensk. Akad. Handl.,* vol. 38: 265–267

saarensis, Vulpes minimus, Skjöldebrand, 1777, *K. svenska Vetensk.*

Akad. Handl., vol. 38: 265–267
Vulpes Frisch, 1775, *Das Natur-System der vierfüssigen Thiere:* 15
Vulpes Skjöldebrand, 1777, *K. svenska Vetensk. Akad. Handl.*, vol. 38: 265–267
vulpes, Canis, Linnaeus, 1758, *Syst. Nat.*, ed. 10, vol. 1: 40

CERTIFICATE

I certify that the votes cast on Voting Paper (78)10 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1129.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
19 January 1978

OPINION 1130
LILIOCERIS REITTER, 1912 (INSECTA; COLEOPTERA) CORRECTION OF TYPE SPECIES

RULING – (1) The following entries in Official Lists are hereby corrected as follows:

(a) Official List of Generic Names in Zoology, No. 1893 to read: "*Lilioceris* Reitter, 1912 (gender: masculine), type species, by subsequent designation by Heinze, 1937, *Chrysomela merdigera* Linnaeus, 1758."

(b) Official List of Specific Names in Zoology, No. 2369 to read: "*lilii* Scopoli, 1763, as published in the binomen *Attelabus lilii.*"

(2) The following specific name is hereby added to the Official List of Specific Names in Zoology with the Name Number 2668: *merdigera* Linnaeus, 1758, as published in the binomen *Chrysomela merdigera* (specific name of type species of *Lilioceris* Reitter, 1912).

HISTORY OF THE CASE Z.N.(S.) 1786

The original object of this application was to conserve the generic names *Crioceris* Müller, 1764 and *Lema* Fabricius, 1798 in their accustomed senses. This was achieved by the ruling given in Opinion 908 (*Bull. zool. Nom.* vol. 27: 12–13, 1970). *Lilioceris* Reitter, 1912, was placed on the Official List of Generic Names in Zoology under the ordinary powers of the Commission as a consequence of the action taken under the plenary powers concerning *Crioceris* and *Lema.* It was then thought that the type species of *Lilioceris* was *Attelabus lilii* Scopoli, 1763, and corresponding entries were accordingly made in the Official Lists of Generic and Specific Names in Zoology.

On 13 May 1974 an application was received from Dr Richard E. White *(Systematic Entomology Laboratory USDA, c/o U.S. National Museum, Washington D.C. 20560)* pointing out that the type species of *Lilioceris* was not *A. lilii* Scopoli, 1763, by subsequent designation by Chûjô, 1951, as had been thought, but *Chrysomela merdigera* Linnaeus, 1758, by subsequent designation by Heinze, 1937. This did not affect any of the taxonomic consequences of Opinion 908; it meant, however, that what had then been thought to be a subjective synonymy between the three generic names became an objective synonymy.

Dr White's application was sent to the printer on 27 August

1974 and published on 13 January 1975 in *Bull. zool. Nom.*, vol. 31: 200. No use of the plenary powers was involved. No comments were received.

DECISION OF THE COMMISSION

On 5 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)12 for or against the proposals published in *Bull. zool. Nom.*, vol. 31: 200. At the close of the voting period on 5 December 1978 the state of the voting was as follows:

Affirmative Votes – seventeen (17) received in the following order: Holthuis, Melville, Alvarado, Mroczkowski, Eisenmann, Vokes, Brinck, Willink, Habe, Tortonese, Cogger, Binder, Bayer, Dupuis, Corliss, Welch, Bernardi

Negative Votes – none (0).

A late affirmative vote was received from Sabrosky. Ride was on leave of absence. No voting papers were returned by Heppell, Kraus and Starobogatov.

Nye abstained from voting and commented: "I cannot vote on this proposal as the application is incomplete. What is to happen to the entry of *Attelabus lilii* at present on the Official List as the type species of *Lilioceris?* Is *Chrysomela merdigera* now to be placed in the Official List in its place, or in addition? It would be more satisfactory to correct the error by setting aside under the plenary powers any type species designation for *Lilioceris* prior to that of Chûjô, 1951."

NOTE BY THE SECRETARY TO THE COMMISSION

In drafting the ruling in this Opinion, I have borne Dr Nye's comment in mind. He is right to point out that Dr White's proposals were incomplete. On the other hand, the minimum inferences necessary to complete them seem to me so easily drawn as not to require a re-opening of the case: the replacement of an incorrect subsequent type-species designation by the correct one automatically entails adding the name of the latter species (*C. merdigera* L.) to the Official List and the removal from the entry for *A. lilii* Scopoli of its citation as the type species of *Lilioceris.* No vote was taken on the question of removing that name from the Official List, however, and in consequence that entry stands as such.

ORIGINAL REFERENCES

The following is the original reference to a name placed on the Official List by the ruling given in the present Opinion:

merdigera, Chrysomela, Linnaeus, 1758, *Syst. Nat.,* ed. 10, vol. 1: 375

The following is the reference to a designation of type species accepted in the ruling given in the present Opinion: of *Chrysomela merdigera* Linnaeus, 1758, as type species of *Lilioceris* Reitter, 1912, by Heinze, 1937, *Bull. Mus. roy. Hist. nat. Belgique,* vol. 13 (25): 3.

CERTIFICATE

I certify that the votes cast on voting paper (78)12 were cast as set out above, that the proposal contained in that voting paper has been duly adopted, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1130.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
22 January 1979

OPINION 1131
AMPHISBAENA MILDEI PETERS, 1878 (REPTILIA): SUPPRESSED UNDER THE PLENARY POWERS

RULING – (1) Under the plenary powers the specific name *mildei* Peters, 1878, as published in the binomen *Amphisbaena mildei,* is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The specific name *mildei* Peters, 1878, as published in the binomen *Amphisbaena mildei,* and as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1051.

HISTORY OF THE CASE Z.N.(S.) 1746

An application from Professor Carl Gans (then of *University of New York, Buffalo, N.Y., U.S.A.)* was first received in February 1966 and published in October 1966 in *Bull. zool. Nom.* vol. 23: 162–163. It was supported by Professor Hobart M. Smith and Dr H. Wermuth, but opposed by the Nomenclature Committee of the American Society of Ichthyologists and Herpetologists. The case involved the application of Article 23b (of the 1964 Code), and the degree of confusion surrounding that provision is well illustrated by the erroneous procedural note published by the Secretary to the Commission in *Bull. zool. Nom.,* vol. 25: 211. The case was not taken to a conclusion at that time.

Professor Gans's original application had been based on the position that *Amphisbaena mildei* was not only an unused name, but also a *nomen dubium,* because Peters's type specimen had been lost. On 14 August 1973 a letter was received from him announcing his rediscovery of the lost type and confirming his previous belief that *A. mildei* was a senior synonym of *A. darwini* Duméril & Bibron, 1839 *trachura* Cope, 1885. He therefore submitted, on 14 September 1973. a fresh application in which he gave evidence of a *prima facie* case for the suppression of *A. mildei* under the revised (1972) provisions of Article 23a–b and 79b. He did not ask that any name be placed on the Official List. This application was sent to the printer on 27 August 1974 and was published on 13 January 1975 in *Bull. zool. Nom.* vol. 31: 201 -203. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory periodicals

and to two herpetological journals. It was supported by the Nomenclature Committee of the American Society of Ichthyologists and Herpetologists. No adverse comment was received.

DECISION OF THE COMMISSION

On 5 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on voting paper 1978(11) for or against the proposals in *Bull. zool. Nom.*, vol. 31: 202. At the close of the voting period on 5 December 1978 the state of the voting was as follows:

Affirmative Votes – fourteen (14) received in the following order: Holthuis, Melville, Alvarado, Eisenmann, Mroczkowski, Vokes, Brinck, Willink, Tortonese, Cogger, Binder, Corliss, Nye, Welch

Negative Votes – three (3): Habe, Dupuis, Bernardi.

A late negative vote was received from Sabrosky. Ride was on leave of absence. Bayer abstained from voting. No voting papers were returned by Heppell, Kraus and Starobogatov.

The following comments were returned by members of the Commission with their voting papers:

Bayer: "It is not clear to me what is required in this case. The applicant goes to some length (p. 201, first paragraph) to show that the overlooked name *Amphisbaena mildei* Peters, 1878, applies to the southern form of *A. darwini* Duméril & Bibron, 1839, later called *trachura* Cope, 1885, to support his request for suppression of *mildei* in favour of the junior name, which has become generally accepted. As he then states (p. 202) that the rediscovered type of *mildei* belongs to the northern form, it would not appear to be in competition with the name of the southern form, and I do not see what its suppression would achieve." [This question was put to Professor Gans, who replied that the rediscovered type belongs in fact to the southern form.]

Bernardi: "Malgré l'appui d'un comité 'ad hoc' je vote contre. Il me parait tout à fait inutile de renoncer au principe de priorité dans le cas d'un nom subspécifique, concernant seulement quelques spécialistes."

Sabrosky: "I think the Nomenclature Committee of the American Society of Ichthyologists and Herpetologists should have stood by their original position. The papers they cite are recent and chiefly taxonomic and I see no overwhelming reason for not applying the name *mildei* based on the unexpected discovery of the type."

ORIGINAL REFERENCE

The following is the original reference to a name placed on an Official Index by the ruling given in the present Opinion:

mildei, Amphisbaena, Peters, 1878, *Monatsber. k. preuss. Akad. Wiss.*, 1878: 778–781

CERTIFICATE

I certify that the votes cast on voting paper (78)11 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1131.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
22 January 1979

OPINION 1132
TWO WORKS BY HEMPRICH & EHRENBERG, 1828, SUPPRESSED UNDER THE PLENARY POWERS; *HETEROTIS* RUPPELL, 1829, *EX* EHRENBERG MS (PISCES) VALIDATED UNDER THE PLENARY POWERS AND PLACED ON THE OFFICIAL LIST WITH *ARAPAIMA* MULLER, 1843 (PISCES)

RULING – (1) Under the plenary powers

(a) the following works are hereby suppressed for the purposes of zoological nomenclature and it is ruled that no name acquires the status of availability by virtue of having been published therein:

(i) Hemprich & Ehrenberg, 1828a, *Symbolae Physicae seu Icones et Descriptiones Piscium.* Berlin (Mittler);

(ii) Hemprich & Ehrenberg, 1828b, *Symbolae Physicae seu Icones et Descriptiones Zootomicrorum.* Berlin (Mittler);

(b) the generic name *Heterotis* is ruled to be available as from its publication in synonymy by Rüppell, 1829.

(2) The following generic names are placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Heterotis* Rüppell, 1829 *ex* Ehrenberg MS (gender: masculine), type species, by monotypy, *Sudis niloticus* Cuvier, 1829, *ex* Ehrenberg MS, as validated under the plenary powers in (1) (b) above (Name Number 2077);

(b) *Arapaima* Müller, 1843 (gender: feminine), type species, by monotypy, *Sudis gigas* Schinz, 1822 (Name Number 2078).

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *niloticus* Cuvier, 1829, *ex* Ehrenberg MS, as published in the binomen *Sudis niloticus* (specific name of type species of *Heterotis* Rüppell, 1829 *ex* Ehrenberg MS) (Name Number 2669);

(b) *gigas* Schinz, 1822, as published in the binomen *Sudis gigas* (specific name of type species of *Arapaima* Müller, 1843) (Name Number 2670).

(4) The titles of the two works suppressed under the plenary powers in (1)(a) above are hereby placed on the Official Index of Rejected and Invalid Works in Zoological Nomenclature with the Title Numbers 83 and 84 respectively.

HISTORY OF THE CASE Z.N.(S.) 1807

An application for the addition of *Heterotis* Rüppell, ex Ehrenberg MS to the Official List of Generic Names in Zoology was first received from MM. F. d'Aubenton and J. Daget *(Muséum National d'Histoire Naturelle, Paris)* in April 1967. After an exchange of correspondence, an amended version was published on 7 December 1967 in *Bull. zool. Nom.* vol. 24: 291–293. This application was in part supported and in part criticised by M. J. Géry *(CNRS, Les Eyzies, France) (Bull. zool. Nom.* vol. 25: 64). Dr Harold Roelling *(Adelphi University, Long Island, New York)* proposed that *Heterotis niloticus* should date from Hemprich & Ehrenberg, 1828 (*ibid.:* 194). MM. d'Aubenton & Daget wrote withdrawing their application. Dr William R. Taylor *(U.S. National Museum)* proposed that the two works by Hemprich & Ehrenberg allegedly published in 1828 should be placed on the Official List with that date (*Bull.* vol. 26: 180–182), while their rejection was proposed by Professor J.A.F. Garrick *(Victoria University, Wellington, New Zealand) (Bull.* vol. 27: 2).

FIRST VOTE BY THE COMMISSION

On 13 August 1970 the members of the Commission were invited to vote under the Three-Month Rule, in Part 1 for or against the rejection of the 1828 folio of Hemprich & Ehrenberg, and in Part 2 for or against placing on Official Lists: *Heterotis* Ehrenberg in Rüppell, 1829 and *Arapaima* Müller, 1843; their respective type species, *Sudis niloticus* Ehrenberg in Cuvier, 1829 and *Sudis gigas* Schinz in Cuvier, 1822; and the family name HETEROTIDAE Gill, 1893; and placing *Clupisudis* Swainson, 1839 (a junior objective synonym of *Heterotis*) on the Official Index. At the close of the voting period on 13 November 1970 there were 14 affirmative and three negative votes on Part 1 and 15 affirmative and no negative votes on Part 2 (which was supported by Holthuis and Sabrosky in part only). The following comments were sent in with voting papers:

Holthuis: "In my opinion there is no proof that the two folio papers of 1828 of Ehrenberg's were not published and therefore I have to vote against Part 1. I believe that it would have been wiser to ask the Commission to suppress these publications under the plenary powers. I vote against paragraph (1) (a) in Part 2 because (a) *Heterotis* Ehrenberg in Rüppell, 1829, is incorrectly cited; it was published by Rüppell and should be known as *Heterotis* Rüppell, 1829; (b) *Heterotis* Rüppell, 1829, was published, as correctly pointed out by Dr Taylor, as a synonym, and is available only if it

has been treated as a valid name before 1961; (c) as long as *Heterotis* Ehrenberg, 1828 is not suppressed, *Heterotis* Rüppell, 1829 is invalid."

Sabrosky: "Gender of *Arapaima:* is this masculine or feminine? My colleague George Steyskal finds that it is derived from an aboriginal word and believes that it should be treated under Article 30b(ii), last sentence, under which a word ending in -a would normally be considered to have a natural classical feminine ending.

"I oppose placing *Clupisudis* on the Official Index because I do not believe in cluttering up that Index with unnecessary items. A junior objective syonym is dead without action on our part, so long as the senior synonym is valid and available. It would also be advantageous, should the senior synonym at some time be found unavailable for use (e.g. a junior homonym), to be able to resurrect the junior synonym and use it without needing formal action to remove it from the Official Index." Dr Sabrosky also asked that the question of the authorship of *Heterotis* and of *Sudis niloticus* be re-examined.

The study of these comments led me to believe that the grounds on which the Commission was being asked to act should be carefully studied. My conclusions were published on 27 March 1975 in *Bull. zool. Nom.* vol. 32: 56–59. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to an ichthyological periodical. The proposals were supported by Professor Tortonese, but Mr R.K. Broke *(Durban Museum, Durban, RSA)* thought that *Arapaima* should be treated as neuter (*ibid.:* 200).

Mr Brooke's comment caused me to seek the advice of my colleague, Dr Willink, on South American ichthyologists who might provide information on the gender of *Arapaima.* The most appropriate authority, Dr Heraldo Britski *(Museu da Zoologia da Universidade de São Paulo, Brazil)* learned from the anthropologist Dr Egon Schaden, of Sao Paulo University, that "arapaima" (originally "warapaima" of the Macusis tribe) is a word of the Carib language and without gender. Dr Britski suggested that since the name of the type species *(Sudis gigas)* is a masculine noun, *Arapaima* should be treated as masculine. Dr Caravello, of the Department of Biological Sciences, Federal University of São Carlos, Brazil, stated that the generic name is treated as feminine, as are other names ending in *-a* derived from aboriginal languages.

There is no doubt in my mind that Dr Sabrosky and Mr Steyskal have read the Code correctly and that the name is to be treated as feminine, with *gigas* as a masculine noun in apposition. As Dr Britski's advice was not received until after the close of the

second voting period, and as his suggestion could only be implemented through a fresh application for the use of the plenary powers, I decided to conclude the matter without further delay.

DECISION OF THE COMMISSION

On 5 September 1978 the members of the Commission were invited to vote under the Three- Month Rule on voting paper (1978)13 for or against the proposals set out in *Bull. zool. Nom.*, vol. 32: 58. At the close of the voting period on 5 December 1978 the state of the voting was as follows:

Part 1

Affirmative Votes – eighteen (18) received in the following order: Holthuis, Melville, Alvarado, Eisenmann, Mroczkowski, Vokes, Brinck, Willink, Tortonese, Cogger, Binder, Bayer, Corliss, Habe, Nye, Dupuis (conditional vote), Welch, Bernardi

Negative Votes – none (0).

Part 2

For feminine – sixteen (16) received in the following order: Holthuis, Melville, Alvarado, Eisenmann, Mroczkowski, Vokes, Brinck, Willink, Tortonese, Cogger, Binder, Bayer, Corliss, Habe, Nye, Welch

For neuter – one (Dupuis)

Sabrosky returned a late affirmative vote in Part 1 and for "feminine" in Part 2. Bernardi abstained on Part 2. Ride was on leave of absence. No votes were returned by Heppell, Kraus and Starobogatov.

The following comments were sent in by members of the Commission with their voting papers:

Eisenmann: "It is less likely to cause confusion if *Arapaima* (which looks feminine) is treated as such."

Willink: "Not all indigenous names in Spanish or Portuguese America ending in *-a* are feminine as Sabrosky and Steyskal imply; there are masculine nouns ending in *-a*. In the case of *Arapaima*, as a vernacular name, it is used as masculine. Is it then right to make it feminine?"

Dupuis: "A l'argumentation présentée, il faut ajouter les faits suivants (établis par mon collègue ichthyologiste J.C. Hureau).

"Les manuscrits de l'*Histoire naturelle des poissons* de Cuvier & Valenciennes existent à Paris, à la Bibliothèque Centrale du Muséum National d'Histoire Naturelle. Le MS 518 renferme un calque de la figure d'Ehrenberg, relevé par Valenciennes lors de son voyage à Berlin en 1827. Ce calque (dont l'échelle diffère de celle de la planche gravée) porte les mentions suivantes: 'A.V. Berlin 1827' – *'Sudis niloticus* nov. gen.' (de la main de Valenciennes)

'Ehrenberg' (de la main de Cuvier) '*Heterotis* Ehr.' (de la main de Cuvier).

"Ce document prouve que Cuvier a utilisé un manuscrit d'Ehrenberg; par suite, une citation bibliographique complète aussi bien du nom *niloticus* que du nom *Heterotis* exige la mention de cette circonstance.

"En conséquence, je vote les propositions du *Bull.* 32: 58 comme suit:

"1a – contre (je refuse de supprimer deux publications dont l'histoire reste à éclaircir et dont l'une n'a d'ailleurs pas de rapport avec la question examinée).

"1b – pour, sous les deux conditions expresses suivantes:

(1) on écrira: *Sudis niloticus* Cuvier, 1829, ex Ehrenberg MS

(2) on écrira: *Heterotis* Rüppell, 1829, ex Ehrenberg MS

"2a – pour, à condition qu'on écrive *Heterotis* Rüppell, 1829, ex Ehrenberg MS.

"2b – contre le genre féminin et pour le genre neutre (*Arapaima* est un nom barbare, sans tradition classique).

"3a – pour, à condition qu'on écrive *niloticus* Cuvier, 1829 ex Ehrenberg MS.

"3b – pour.

"Par condition expresse, il faut comprendre que si le nom d'Ehrenberg n'était pas cité dans l'Opinion, je déclare voter contre l'ensemble de la proposition." [Since Monsieur Dupuis's comment makes no difference to the nomenclatural aspects of the case, his wishes as regards the form of bibliographic citation of the names have been respected. R.V.M.]

Sabrosky: "May I ask why my comment on the authorship of *Heterotis* (Z.N.(S.) 1925, *Bull. zool. Nom.* vol. 31: 206–207) was not cited among the documents on this case? The present proposals on authorship are, of course, agreeable to me." [The omission is regretted. R.V.M.]

ORIGINAL REFERENCES

The following are the original references for the names and works placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Arapaima J. Müller, 1843, *Arch. Naturges.*, Jahrg. 9, vol. 1: 192

gigas, *Sudis*, Schinz, 1822, in Cuvier, *Das Thierreich aus dem französischen frey übersetzt* ... vol. 2: 305

Hemprich, F.G. & Ehrenberg, C.G., 1828a, *Symbolae Physicae seu Icones et Descriptiones Piscium ... edidit Dr C.G. Ehrenberg* ... Berolino ex Officina Academica. Venditur a Mittlero

Hemprich, F.G. & Ehrenberg, C.G., 1828b. *Symbolae Physicae seu Icones et Descriptiones Zootomicrorum* ... edidit Dr C.G. Ehrenberg ... Berolini ex Officina Academica. Venditur a Mittlero

Heterotis Rüppell, 1829, ex Ehrenberg MS, *Beschreibung und Abbildung mehrerer neuer Fische im Nil entdeckt:* 10

niloticus Cuvier, 1829, ex Ehrenberg MS, *Règne Animal* (2nd edition), vol. 2: 328.

CERTIFICATE

I certify that the votes cast on voting paper (78)13 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1132.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
31 January 1979

OPINION 1133
SUPPRESSION UNDER THE PLENARY POWERS OF NAMES FOR GENERA AND SPECIES OF AMPHIPODA PROPOSED BY RAFINESQUE BETWEEN 1814 AND 1820

RULING – (1) Under the plenary powers

(a) the following generic names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:
  (i) *Psammylla* Rafinesque, 1817;
  (ii) *Sperchius* Rafinesque, 1820;

(b) the following specific names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:
  (i) *bispinosa* Rafinesque, 1814, as published in the binomen *Pisitoe bispinosa;*
  (ii) *littoralis* Rafinesque, 1817, as published in the binomen *Psammylla littoralis;*
  (iii) *lucidus* Rafinesque, 1820, as published in the binomen *Sperchius lucidus;*
  (iv) *potamogeti* Rafinesque, 1817, as published in the binomen *Pephredo potamogeti;*

(c) all designations of type species hitherto made for the nominal genus *Talitrus* Bosc, [1802] are hereby set aside and the nominal species *Cancer (Gammarellus) saltator* Montagu, 1808, is hereby designated as type species of that genus;

(d) the family name TALITRIDAE Rafinesque, 1815 (type genus *Talitrus* Bosc, [1802]) is hereby given nomenclatural precedence over the family name ORCHESTIIDAE Leach, 1814 (type genus *Orchestia* Leach, 1814) whenever the two names are regarded as synonyms;

(e) it is hereby directed that the following nominal species are to be interpreted by the neotypes designated by Holthuis, 1969, *Bull. zool. Nom.*, vol. 26: 106, paragraph 3a and: 107, paragraph 3c respectively:
  (i) *Lepleurus rivularis* Rafinesque, 1820;
  (ii) *Pisitoe levifrons* Rafinesque, 1814.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Crangonyx* Bate, 1859 (gender: masculine), type species,

by monotypy, *Crangonyx subterraneus* Bate, 1859 (Name Number 2079);

(b) *Orchestia* Leach, 1814 (gender: feminine), type species, by monotypy, *Cancer (Gammarus) littoreus* Montagu, 1808 (Name Number 2080);

(c) *Phronima* Latreille, [1802] (gender: feminine), type species, by monotypy, *Cancer sedentarius* Forsskål, 1775 (Name Number 2081);

(d) *Phrosina* Risso, 1822 (gender: feminine), type species, by subsequent designation by Stebbing, 1888, *Phrosina semilunata* Risso, 1822 (Name Number 2082);

(e) *Synurella* Wrzesniowski, 1877 (gender: feminine), type species, by monotypy, *Synurella polonica* Wrzeniowski, 1877 (Name Number 2083);

(f) *Talitrus* Bosc, [1802] (gender: masculine), type species, by designation under the plenary powers in (1) (c) above, *Cancer (Gammarellus) saltator* Montagu, 1808 (Name Number 2084);

(g) *Talorchestia* Dana, 1852 (gender: feminine), type species, by subsequent monotypy (Dana, 1853), *Talitrus gracilis* Dana, 1852 (Name Number 2085).

(3) The following names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *fasciatus* Say, 1818, as published in the binomen *Gammarus fasciatus* (Name Number 2671);

(b) *gammarellus* Pallas, 1766, as published in the binomen *Oniscus gammarellus* (Name Number 2672);

(c) *gracilis* Dana, 1852, as published in the binomen *Talitrus gracilis* (specific name of type species of *Talorchestia* Dana, 1852) (Name Number 2673);

(d) *locusta* Linnaeus, 1758, as published in the binomen *Cancer locusta* (Name Number 2674);

(e) *longicornis* Say, 1818, as published in the binomen *Talitrus longicornis* (Name Number 2675);

(f) *minus* Say, 1818, as published in the binomen *Gammarus minus* (Name Number 2676);

(g) *platensis* Krøyer, 1844, as published in the binomen *Orchestia platensis* (Name Number 2677);

(h) *polonica* Wrzesniowski, 1877, as published in the binomen *Synurella polonica* (specific name of type species of *Synurella* Wrzesniowski, 1877) (Name Number 2678);

(i) *saltator* Montagu, 1808, as published in the combination *Cancer (Gammarellus) saltator* (specific name of type

species of *Talitrus* Bosc, [1802]) (Name Number 2679);

(j) *sedentarius* Forsskål, 1775, as published in the binomen *Cancer sedentarius* (specific name of type species of *Phronima* Latreille, [1802]) (Name Number 2680);

(k) *semilunata* Risso, 1822, as published in the binomen *Phrosina semilunata* (specific name of type species of *Phrosina* Risso, 1822) (Name Number 2681);

(l) *subterraneus* Bate, 1859, as published in the binomen *Crangonyx subterraneus* (specific name of type species of *Crangonyx* Bate, 1859) (Name Number 2682).

(4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:

(a) ORCHESTIIDAE (correction of ORCHESTIDAE) Leach, 1814 (type genus *Orchestia* Leach, 1814), with an endorsement that it is not to be given priority over TALITRIDAE Rafinesque, 1815 by anybody who believes that *Orchestia* Leach and *Talitrus* Bosc belong to the same family-group taxon (Name Number 496);

(b) PHRONIMIDAE (correction of PHRONIMIA) Rafinesque, 1815 (type genus *Phronima* Latreille, [1802]) (Name Number 497);

(c) PHROSININAE Dana, 1852 (type genus *Phrosina* Risso, 1822) (Name Number 498);

(d) TALITRIDAE (correction of TALITRIDIA) Rafinesque, 1815 (type genus *Talitrus* Bosc, [1802]) with an endorsement that it is to be given nomenclatural precedence over ORCHESTIIDAE Leach, 1814 by anybody who believes that *Talitrus* Bosc and *Orchestia* Leach belong to the same family-group taxon (Name Number 499).

(5) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers specified:

(a) *Dactylocera* Latreille, 1829, a junior objective synonym of *Phrosina* Risso, 1822 (Name Number 2105);

(b) *Pisitoe* Rafinesque, 1814, a junior objective synonym of *Phronima* Latreille, [1802] (Name Number 2106);

(c) *Psammylla* Rafinesque, 1814, as suppressed under the plenary powers in (1) (a) (i) above (Name Number 2107);

(d) *Sperchius* Rafinesque, 1820, as suppressed under the plenary powers in (1) (a) (ii) above (Name Number 2108).

(6) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology, with the

Name Numbers specified:

(a) *bispinosa* Rafinesque, 1814, as published in the binomen *Pisitoe bispinosa,* and as suppressed under the plenary powers in (1) (b) (i) above (Name Number 1052);

(b) *levifrons* Rafinesque, 1814, as published in the binomen *Pisitoe levifrons,* a junior objective synonym of *Cancer sedentarius* Forsskål, 1775 through the neotype designation made under the plenary powers in (1) (e) (ii) above (Name Number 1053);

(c) *littoralis* Rafinesque, 1817, as published in the binomen *Psammylla littoralis,* and as suppressed under the plenary powers in (1) (b) (ii) above (Name Number 1054);

(d) *lucidus* Rafinesque, 1820, as published in the binomen *Sperchius lucidus,* and as suppressed under the plenary powers in (1) (b) (iii) above (Name Number 1055);

(e) *potamogeti* Rafinesque, 1817, as published in the binomen *Pephredo potamogeti,* and as suppressed under the plenary powers in (1) (b) (iv) above (Name Number 1056);

(f) *rivularis* Rafinesque, 1820, as published in the binomen *Lepleurus rivularis,* a junior objective synonym of *Gammarus minus* Say, 1818 through the neotype designation made under the plenary powers in (1) (e) (i) above (Name Number 1057).

NOTE ON THE DATES ASSIGNED TO CERTAIN NAMES IN THE PRESENT RULING

In his original application (see the History of the Case), Dr Holthuis cited the date of *Phronima* Latreille as "[1802–1803]" and that of Bosc as "[1801–1802]", and those were the correct bibliographic dates for the works containing those names, according to the evidence then available to him, namely that published by Griffin, 1938, *J. Soc. Bibl. nat. Hist.,* vol. 1: 157. In the light of Griffin's assumptions, the correct nomenclatural date for Latreille's *Hist. nat. gén. partic. Crust. Ins.,* vol. 3, would have been the last day of "An XI" corrected to the Gregorian calendar, i.e. [23 September 1803] under Article 21b(ii) of the present Code.

Professor Dupuis, however, has shown (*Bull. zool. Nom.,* vol. 32: 4) that the publication of vols. 3 and 4 of Latreille's work was announced in the *Journal typographique et bibliographique,* 6e année, No. VI: 42, 15 brumaire, An XI, which corresponds to [6 November 1802] in the Gregorian calendar. Vol. 3 must have been published at some date between April 1802 (cited on: 369 of the

volume) and that date. Since Professor Dupuis showed at the same time that Bosc's *Hist. nat. Crust.*, vol. 2 must have been published before 20 January 1802, the relative priority of the two works is not in question. It is beyond the terms of the present Opinion to research further into the exact date of publication of Latreille's vol. 3.

HISTORY OF THE CASE Z.N.(S.) 1879

An application by Dr E.L. Bousfield *(National Museum of Natural Sciences, Ottawa, Canada)* and Professor Holthuis for the suppression of names proposed for Amphipod genera and species by Rafinesque was first received on 3 February 1969. It was sent to the printer on 15 February 1969 and published on 8 August 1969 in *Bull. zool. Nom.* vol. 26: 105–112. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to a Crustacean serial. Dr Sabrosky wrote in February 1970 to protest against the proposed use of the Commission's plenary powers to suppress *nomina dubia,* drawing attention to his own earlier application on this subject (*Bull. zool. Nom.* vol. 22: 265–266). Professor Holthuis replied that "whatever the identity of Rafinesque's species and genera is, their names, if revived, will preoccupy well-established and widely adopted Amphipod names. To me the most logical solution to this problem is to eliminate these threats. To leave them dangling in the air forever like so many swords of Damocles does not seem to have any advantage".

FIRST VOTE BY THE COMMISSION

On 28 November 1973 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1973)14 for or against the proposals set out in *Bull. zool. Nom.* vol. 26: 109–112. At the close of the voting period on 28 February 1974 there were 14 affirmative votes, four negative votes and two abstentions (two late positive votes and one late negative vote were also eventually returned). The following comments were submitted by members of the Commission with their voting papers:

Tortonese: "I vote 'for' because too often the revival of old and unwanted names threatens the stability of nomenclature. I agree with Dr Holthuis that such a danger is better avoided by suppressing the names."

Willink: "I fully agree with Dr Holthuis".

Dupuis: "Je déclare m'abstenir car il n'y a pas une seule proposition, mais plusieurs. Pour la suppression de *nomina dubia* je

partage l'avis de Sabrosky. Pour la désignation de néotypes je suis toujours très réticent."

Sabrosky: "Holthuis's riposte is clever and appealing, but misses the main point of my statement in *Bull.* vol. 22: 265–266. At this late date, the chances of such old *nomina dubia* rising from the dead must surely be exceedingly remote. This case should not even be considered until the arguments in my application have been evaluated and voted upon.

"One exception: I will support the requested action for *Talitrus,* but with the comment that an application for action on a misidentified type species should have been a separate case and not mixed up with Rafinesque's *nomina dubia.* A zoologist interested in *Talitrus* and TALITRIDAE, and who depends on published lists of cases before the Commission would not have been alerted by the title of this application to the fact that the case proposed important action on the type species of *Talitrus* Bosc."

Melville: "No vote. Dr Sabrosky's comment has not yet been fully dealt with."

Rohdendorf: "I vote against because I am almost convinced of the prematurity of many proposed suppressions of Rafinesque's *nomina dubia."*

Heppell: "The case should be treated, as suggested by Dr Sabrosky, under the provisions for *nomina dubia.* If the identity of Rafinesque's names are eventually decided, the names can then be dealt with under the provisions for unused names."

Bernardi: "Je pense, comme le Dr Sabrosky, que les *nomina dubia* doivent être abordés uniquement d'un point de vue taxonomique et n'exigent donc pas l'intervention de la Commission."

Professor Dupuis was invited to explain more fully the reasons for his abstention. His explanation, and Professor Holthuis's reply, were published in *Bull. zool. Nom.* vol. 32: 3–8. No other comment was received.

DECISION OF THE COMMISSION

A second voting paper – Voting Paper (1978)14 – was circulated to the members of the Commission under the Three-Month Rule on 5 September 1978. At the close of the voting period on 5 December 1978 the state of the voting was as follows:

Affirmative Votes – fourteen (14) received in the following order: Holthuis, Melville, Alvarado, Eisenmann, Vokes, Brinck, Willink, Tortonese, Binder, Bayer, Corliss, Habe, Nye, Welch

Negative Votes – three (3): Mroczkowski, Dupuis, Bernardi.

Cogger abstained from voting; Ride was on leave of absence. Sabrosky sent in a late abstention. No voting papers were returned

by Heppell, Kraus and Starobogatov.

The following comments were sent in by members of the Commission with their voting papers:

Cogger: "Despite Holthuis's reply to Dupuis, the latter's case is convincing – the more so because of the errors discovered in the original proposal. Although such errors are fairly trivial and do not alter the basic case, they point up the problems inherent in dealing with a multiplicity of nomenclatural decisions in one vote. I strongly endorse many of the views held by Dupuis, but as my views are based largely on principles rather than on specifics, it seems appropriate to abstain from voting in this case."

Dupuis: "Je vote contre un trop grand nombre de mesures proposées simultanément ('plus le nombre de mesures augmente, plus il y a de chances de commettre des erreurs', Dupuis, *Bull.* vol. 32: 4).

"Si la Commission dans sa majorité votait pour, il conviendrait que le Secrétaire tienne compte que l'auteur de certains noms est bien Latreille in Bosc (conformément à Dupuis l.c.: 4) et non pas Bosc (Holthuis, *Bull.* vol. 32: 6).

"Bosc écrit en effet, vol. 1: 29: 'Latreille, dans les préliminaires d'un savant travail sur les Crustacés, préliminaire [sic] *dont il a permis de faire usage ici ...'*. Il écrit encore, vol. 1: 48: 'Le savant auteur du Précis des caractères des [sic] génériques des insectes, l'estimable Latreille, regardant, avec tous les Naturalistes, les crustacés comme faisant partie de son domaine, les a aussi analysés, et il l'a fait avec la sagacité qui lui est propre. On ne parlera pas de son premier travail, de celui consigné dans l'ouvrage qui vient d'être cité; il n'étoit qu'un aperçu: mais *on donnera en entier celui qu'il a rédigé pour une nouvelle édition, et dont il a permis de faire usage ici.* Le louer seroit superflu, puisque le lecteur est mis à portée d'apprécier tout son mérite.'

"Au demeurant, Bosc lui-même donne bien Latreille comme auteur de *Pinnotheres* (vol. 1: 239), de *Talitrus* (vol. 2: 148), de *Bopyrus* (vol. 2: 213), de *Sphaeroma* (vol. 2: 182).

"Latreille a confirmé tout cela (*Hist. nat. gén. partic.*, vol. 5: 172–173): 'L'ouvrage de Bosc présente ... plusieurs observations sur les Crustacés, que ce naturaliste a recueillies en Caroline .... Je lui avois communiqué mon nouveau travail dans cette partie des animaux sans vertèbres. L'expression de sa gratitude à mon égard a été celle d'*un homme qui sait apprécier les recherches des autres; qui ne s'en sert jamais sans rendre hommage à leur auteur,* et dont le coeur est doué d'une sensibilité exquise.' Italiques de C. Dupuis."

Bernardi: "Bien que prenant en considération la réponse de Holthuis, je considere que cette application a un caractere trop global."

Professor Holthuis was invited to comment on Professor Dupuis' observations and did so in two letters dated 6 December 1978 and 15 January 1979 (the second in reply to a request from the Secretary for further information). The first letter read:

"In my opinion Bosc nowhere says that the descriptions of *Pinnotheres, Talitrus,* etc., are cited from Latreille or written by Latreille. The fact that he made use of Latreille's manuscript does not imply that he copied the descriptions. The crucial sentence in Bosc's book is the one on: 48: 'mais on donnera en entier celui qu'il a rédigé pour une nouvelle édition'. I interpreted this as 'I give here all the work [*celui* agreeing with *travail*] that he has prepared for a new edition', but that does not mean that Bosc copied the manuscript verbatim. When we compare Bosc's definition of *Talitrus* (1801, vol. 1: 78) with Latreille's (1802, vol. 3: 38, 39), we see that Bosc used his own words: 'Quatre antennes simples; les intermédiaires, supérieures, et plus courtes que le pédoncule des latérales et inférieures; dix à quatorze pattes'. Latreille used a similar but slightly different definition: 'Antennes simples: les intermédiaires supérieures et plus courtes que les latérales et inférieures. (Dix à quatorze pattes). Une queue; des pièces articulées au bout'. In their more extensive accounts of the genus (Bosc, vol. 2: 148–152; Latreille, vol. 6: 294–302) the differences are much more striking. Bosc (vol. 2: 152) even includes a new species (collected by himself) in the genus, which Latreille (vol. 6: 300) accepts and refers to Bosc.

"My impression is that Bosc consulted Latreille's manuscript, but did not copy it literally. He used his own wording and made important changes and additions. I do not think that in these cases Latreille 'is alone responsible both for the name and for the conditions that make it available'.

The second letter read:

"Article 50 of the Code says that the author of a scientific name is the person who first publishes it (here Bosc), unless it is clear from the contents of the publication that another person (here supposedly Latreille) is alone responsible both for the name and the conditions that make it available. I have always interpreted this rule to mean that there must be a definite statement in the original publication that someone other than the author of the publication is responsible for the names and the descriptions of all or some specifically mentioned taxa. I do not believe that Bosc makes this clear in his book.

"In the introduction to his *Histoire naturelle des Crustacés* (1802, vol. 1: 1–48) Bosc deals extensively with the various classifications of the Crustacea by previous authors (Fabricius, Herbst, Müller, Cuvier, Lamarck) and then speaks of Latreille's then un-

published work (*Hist. nat. gén. partic. Crust. Ins.*). After barely mentioning Latreille's first work, his 1796 *Précis caract. génériques Ins.* ('On ne parlera pas de son premier travail'), Bosc continues that a new edition has been prepared by Latreille and that 'on donnera en entier celui qu'il a rédigé pour une nouvelle édition, et dont il a permis de faire usage ici'. The next 43 pages of Bosc's Introduction (: 49–91) then give a classification of the Crustacea down to the genera. This classification, although it may have been inspired by Latreille's unpublished research, is certainly not a verbatim citation of Latreille's text. The order in which the genera are treated is totally different from that published by Latreille (*Hist. nat. gén. partic.*, vol. 3: 13–43). Thus, for instance, *Bopyrus,* which Bosc places among the 'Crustacés improprement dits' (which form the 'Section seconde' of the Crustacea) was placed by Latreille (vol. 3: 43) with the other Isopoda in the 'Sous-classe première. Tétracères; tetracera' of the Class Insecta and was thus excluded from the Crustacea.

"That Bosc's classification is not a citation of Latreille's is also shown by the different wording of the diagnoses of the genera. It is clear that Bosc used Latreille's results and accepted several of his genera, but the descriptions are at least partly in his own words, while he added characters, remarks, etc. Latreille is thus certainly not 'alone responsible both for the name and the conditions that make it available'.

"A comparison of the works of the two authors shows that each gave first a brief review of the genera with diagnosis of each (Bosc, vol. 1: 49–91; Latreille, vol. 3: 13–40 (Crustacea), : 40–42 (Insecta Tetracera) and later treated the genera and species more extensively (Bosc, vol. 1: 161–258, vol. 2; Latreille, vol. 5: 346–395, vol. 6: 1–338 for the Crustacea, : 339–376, vol. 7: 1–55 for the Insecta Tetracera). The diagnoses of *Bopyrus, Talitrus* and *Pinnotheres* are similar in the characters used but differ in the wording. In my opinion, Bosc gave the diagnoses in his own words as far as he possibly could. The extended accounts of the three genera are so different that there cannot be any doubt that both are original, even if each was influenced by the other.

"Bosc described a new species, *Talitrus grillus,* that he had himself collected in North America, and this was accepted by Latreille and attributed to Bosc. Latreille further says (vol. 6: 294): 'Bosc a bien développé les caractères génériques des talitres. Ils ont, dit-il, généralement le corps plus épais ...'. He would scarcely have said this if Bosc had merely copied his (Latreille's) description.

"Thus, although Latreille may have been the spiritual father of *Bopyrus, Talitrus* and *Pinnotheres,* nomenclaturally it is Bosc who is to be cited as their author, for he first published Latreille's

manuscript names with his own descriptions and observations. Why did these early authors with all their good intentions (both Bosc and Latreille behaved as perfect gentlemen here) make our nomenclatural life so difficult?"

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and Indexes by the ruling given in the present Opinion:

bispinosa, Pisitoe, Rafinesque, 1814, *Précis Découv. somiol.:* 25

Crangonyx Bate, 1859, *Nat. Hist. Rev. Dublin,* vol. 6 (*Proc. Dublin zool. bot. Ass.,* Feb. 18, 1859): 165

Dactylocera Latreille, 1829, in Cuvier, *Règne Animal* (ed. 2), vol. 4: 117

fasciatus, Gammarus, Say, 1818, *J. Acad. nat. Sci. Philadelphia,* vol. 1: 374

gammarellus, Oniscus, Pallas, 1766, *Misc. Zool.:* 191

gracilis, Talitrus, Dana, 1852, *Proc. Amer. Acad. Sci.,* vol. 2: 201

levifrons, Pisitoe, Rafinesque, *Précis Découv. somiol.:* 26

littoralis, Psammylla, Rafinesque, 1817, *Amer. mon. Mag. crit. Review,* vol. 2: 41

locusta, Cancer, Linnaeus, 1758, *Syst. Nat.* (ed. 10), vol. 1: 634

longicornis, Talitrus, Say, 1818, *J. Acad. nat. Sci. Philadelphia,* vol. 1: 384

lucidus, Sperchius, Rafinesque, 1820, *Annals of Nature,* vol. 1: 7

minus, Gammarus, Say, 1818, *J. Acad. nat. Sci. Philadelphia, vol. 1:* 376

Orchestia Leach, 1814, Brewster's *Edinburgh Encycl.,* vol. 7, 402, 432

ORCHESTIIDAE (correction of ORCHESTIDAE) Leach, 1814, Brewster's *Edinburgh Encycl.,* vol. 7: 432

Phronima, Latreille, [1802], *Hist. nat. gén. partic. Crust. Ins.,* vol. 3: 38

PHRONIMIDAE (correction of "Phronimia") Rafinesque, 1815, *Anal. Nature:* 100

Phrosina Risso, 1822, *J. Phys. Chim. Hist. nat. Arts,* vol. 94: 244

PHROSININAE (correction of "Phrosinia") Rafinesque, 1815, *Anal. Nature:* 100

Pisitoe Rafinesque, 1814, *Précis Découv. somiol.:* 25

platensis, Orchestia, Krøyer, 1844, *Naturhist. Tidsskr.* (2), vol. 1 (3): 304

polonica, Synurella, Wrzesniowski, 1877, in Hoyer, *Zeitschr. wiss. Zool.,* vol. 28: 403

potamogeti, Pephredo, Rafinesque, 1817, *Amer. mon. Mag. crit. Review,* vol. 2: 41
Psammylla Rafinesque, 1817, *Amer. mon. Mag. crit. Review,* vol. 2: 41
rivularis, Lepleurus, Rafinesque, 1820, *Annals of Nature,* vol. 1: 7
saltator, Cancer (Gammarellus), Montagu, 1808, *Trans. linn. Soc. London,* vol. 9: 94
sedentarius, Cancer, Forsskål, 1775, *Descr. Anim.*: 95
semilunata, Phrosina, Risso, 1822, *J. Phys. Chim. Hist. nat. Arts.,* vol. 95: 245
Sperchius Rafinesque, 1820, *Annals of Nature,* vol. 1: 7
subterraneus, Crangonyx, Bate, 1859, *Nat. Hist. Rev. Dublin,* vol. 6 (*Proc. Dublin zool. bot. Ass.,* Feb. 18, 1859): 165
Synurella Wrzesniowski, 1877, in Hoyer, *Zeitschr. wiss. Zool.,* vol. 28: 403
TALITRIDAE (correction of "Talitridia") Rafinesque, 1815, *Anal. Nature:* 101
Talitrus Bosc, [1802], *Hist. nat. Crust.,* vol. 2: 148
Talorchestia Dana, 1852, *Amer. J. Sci. Arts* (2), vol. 14: 310.

CERTIFICATE

I certify that the votes cast on Voting Paper (78)14 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1133.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
16 February 1979

OPINION 1134
ZERYNTHIA OCHSENHEIMER, 1816 (INSECTA LEPIDOPTERA) CONSERVED UNDER THE PLENARY POWERS

RULING – (1) Under the plenary powers, the generic name *Parnalius* Rafinesque, 1815, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Zerynthia* Ochsenheimer, 1816 (gender: feminine), type species, through *Thais* Fabricius, 1807, *non* Roeding, 1798, *Papilio hypsipyle* Fabricius, 1776, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2086.

(3) The specific name *polyxena* [Denis & Schiffermueller], 1775, as published in the binomen *Papilio polyxena*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2683.

(4) The generic name *Parnalius* Rafinesque, 1815, as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 2109.

HISTORY OF THE CASE Z.N.(S.) 1884

An application for the use of the plenary powers to suppress the generic name *Parnalius* Rafinesque, 1815, was first received from Mr N.D. Riley *(British Museum (Natural History), London)* and Dr L.G. Higgins *(Focklesbrook Farm, Chobham, Woking, U.K.)* on 20 March 1969. The case was affected by the confusion then surrounding Article 23b of the Code and was accordingly not proceeded with. In July 1974 Mr Riley provided the additional references required under the revised provisions of Articles 23a-b and 79b; the paper was sent to the printer on 27 August 1974 and published on 31 December 1974 in *Bull. zool. Nom.*, vol. 31: 204–205. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* and was sent to the statutory serials as well as to nine entomological serials. An objection by O Kudrna and P.R. Ackery, with a reply by Riley and Higgins, was published in *Bull. zool. Nom.*, vol. 33: 145. No other comment was received.

DECISION OF THE COMMISSION

On 5 September 1978 the members of the Commission were invited to vote under the Three-Month Rule in voting paper (1978) 15 for or against the proposals set out in *Bull. zool. Nom.*, vol. 31: 204–205. At the close of the voting period on 5 December 1978 the state of the voting was as follows:

Affirmative Votes – seventeen (17), received in the following order: Holthuis, Melville, Mroczkowski, Eisenmann, Vokes, Brinck, Willink, Habe, Tortonese, Binder, Bayer, Dupuis, Corliss, Nye, Welch, Bernardi, with a conditional vote from Alvarado

Negative Vote – Cogger.

A late negative vote was returned by Sabrosky. Ride was on leave of absence. No votes were returned by Heppell, Kraus and Starobogatov.

The following comments were returned with voting papers:

Cogger: "Although sympathetic to the original proposal, and agreeing with the proposers that the issue would probably have been resolved as they requested had an early vote been taken, the real question is still one of nomenclatural stability. As the submissions indicate that currently one name is not more widely used or accepted than the other, I favour the application of the Law of Priority."

Nye: "It is certain that *Parnalius* is the senior objective replacement name for *Thais* Fabricius, 1807. It is also certain that *Parnalius* was a nomen oblitum at the time of its reintroduction in 1972 in contravention of Article 23b."

Bernardi: "Je pense que *Parnalius* est bien un nom de remplacement pour *Thais,* mais j'approuve la suppression du nom *Parnalius* tout de même très peu connu des lépidoptéristes."

Sabrosky: "The fact that the family-group name ZERYNTHIINAE will not be affected (Art. 40), whatever the decision, removes that reason for the suppression of *Parnalius.* Unlike the Secretary, it seems clear to me that, in Rafinesque's format, *Parnalius* was a replacement name for *Thais,* otherwise he would merely have cited '*Thais* Fabr.' as he did '*Zelima* Fabr.' and the others."

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Parnalius Rafinesque, 1815, *Analyse de la Nature:* 128

polyxena, Papilio, [Denis & Schiffermueller], 1775, *Ankündung syst. Werkes Schmett, Wiener Gegend:* 162
Zerynthia Ochsenheimer, 1816, *Schmett. Europa,* vol. 4: 29.

CERTIFICATE

I certify that the votes cast on voting paper (78)15 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1134.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
21 February 1979

OPINION 1135
MUREX LOTORIUM LINNAEUS, 1758 (MOLLUSCA: GASTROPODA): RULING ON INTERPRETATION

RULING – (1) Under the plenary powers, it is hereby ruled that the specific name *lotorium* Linnaeus, 1758, as published in the binomen *Murex lotorium*, is to be interpreted by reference to the specimen figured by Reeve, 1844, pl. 6, fig. 19b, British Museum (Natural History) Number 1967696;

(2) The specific name *lotorium* Linnaeus, 1758, as published in the binomen *Murex lotorium*, and as interpreted according to the ruling given in (1) above, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2684.

HISTORY OF THE CASE Z.N.(S.) 1886

An application for the validation of the current interpretation of *Murex lotorium* Linnaeus, 1758 was first received from Dr A.G. Beu (then of *Victoria University, Wellington, New Zealand*) on 2 April 1969. It was sent to the printer on 2 May 1969 and published on 24 October 1969 in *Bull. zool. Nom.*, vol. 26: 174–176. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* and was sent to the statutory serials as well as to three malacological serials. Alternative proposals were put forward by Dr H.A. Rehder (*Bull.* vol. 27: 67) and Dr W.O. Cernohorsky (*Bull.* vol. 27: 133); Dr Beu's reply was published in *Bull.* vol. 28: 78.

DECISION OF THE COMMISSION

On 5 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)16, in Part A for or against the use of the plenary powers in this case, and in Part B to choose between three alternatives: A, the specimen figured by Reeve, 1844, specified by Dr Beu; B, the specimens figured by d'Argenville and Rumphius named by Dr Rehder; and C, the specimen figured by d'Argenville named by Dr Cernohorsky. At the close of the voting period on 5 December 1978, the state of the voting was as follows:

Part A

Affirmative Votes – eighteen (18), received in the following order: Holthuis, Melville, Alvarado, Eisenmann, Mroczkowski, Vokes, Brinck, Willink, Tortonese, Cogger, Binder, Bayer, Dupuis,

Corliss, Habe, Nye, Welch, Bernardi

Negative Votes – none (0).

Part B

For Alternative A – fourteen (14), received in the following order: Holthuis, Melville, Alvarado, Eisenmann, Mroczkowski, Brinck, Willink, Tortonese, Cogger, Binder, Bayer, Corliss, Nye, Welch

For Alternative B – Dupuis

For Alternative C – Vokes, Habe, Bernardi.

Sabrosky returned a late vote for Part A and Part B Alternative C; Ride was on leave of absence; no votes were returned by Heppell, Kraus and Starobogatov.

The following comments were sent in by members of the Commission with their voting papers:

Eisenmann: "As all agree that all the old figures relate to the same species, it seems better to use a figure supported by an extant specimen."

Vokes: "I believe that a figure known to the original author of the name should have preference over one published some 80-odd years later. Furthermore, there should be only one type figure (specimen)."

Dupuis voted for Alternative B in Part B "provided that the figure be coloured". [It is not. R.V.M.]

Sabrosky: "The primary manuscript notes are unpublished, but they indicate that Linnaeus correctly recognised two distinct species, but erred in citing the figures. Cernohorsky's proposal relates the name to Linnaeus, 1758, but shows the error."

ORIGINAL REFERENCE

The following is the orginal reference to a name placed on an Official List by the ruling given in the present Opinion:
Iotorium, Murex, Linnaeus, 1758, *Syst. Nat.*, ed. 10, vol. 1: 749.

CERTIFICATE

I certify that the votes cast on Voting Paper (78)16 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion 1135.

R.V. MELVILLE *Secretary*
International Commission on Zoological Nomenclature
London 2 March 1979

OPINION 1136
CICADETTA STREPITANS KIRKALDY, 1909 (INSECTA: HOMOPTERA) CONSERVED

RULING – (1) Under the plenary powers, the species-group name *obscura* Hudson, 1891, as published in the combination *Cicada [sic] cingulata* Fabricius *a.* var. *obscura,* is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The specific name *strepitans* Kirkaldy, 1909, as published in the binomen *Cicadetta strepitans,* is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2685.

(3) The species-group name *obscura* Hudson, 1891, as published in the combination *Cicada [sic] cingulata* Fabricius *a.* var. *obscura,* and as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1058.

HISTORY OF THE CASE Z.N.(S.) 1888

An application from Dr (now Sir) Charles Fleming and Dr J.S. Dugdale *(D.S.I.R., Lower Hutt, New Zealand)* for the conservation of *Cicadetta strepitans* Kirkaldy, 1909, was first received on 8 April 1969. The case was one of a number involving the application of Article 23b of the 1961 Code, all of which were held back pending clarification of that provision. A revised application, adapted to Articles 23a-b and 79b of the 1972 (Monaco) amendments to the Code, was sent to the printer on 29 May 1974 and published on 20 September 1974 in *Bull. zool. Nom.* vol. 31: 140–141. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to nine entomological serials. No comments were received.

DECISION OF THE COMMISSION

On 5 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)17 for or against the proposals set out in *Bull. zool. Nom.* vol. 31: 141. At the close of the voting period on 5 December 1978 the state of the voting was as follows:

Affirmative Votes – fifteen (15) received in the following

order: Holthuis, Melville, Alvarado, Mroczkowski, Eisenmann, Vokes, Brinck, Habe, Tortonese, Cogger, Binder, Bayer, Corliss, Nye, Welch

Negative Votes – three (3): Willink, Dupuis, Bernardi.

Sabrosky returned a late negative vote; Ride was on leave of absence; no votes were returned by Heppell, Kraus and Starobogatov.

The following comments were returned with voting papers:

Willink: "It seems to me that Kirkaldy had no reason to change *C. cingulata obscura* Hudson to *C. strepitans,* so why change it now?"

Bernardi: "Il n'y a aucune difficulté sur l'emploi du nom *obscura* puisqu'il existe un lectotype, et il n'y avait aucune raison de le remplacer par un autre nom *(strepitans).* Il n'y a donc qu'à rétablir le nom *obscura."*

ORIGINAL REFERENCES

The following are the original references for names placed on an Official List and an Official Index by the ruling given in the present Opinion:

obscura, Cicada cingulata Fabricius *a.* var., Hudson, 1891, *Trans. N.Z. Inst.*, vol. 23: 51

strepitans, Cicadetta, Kirkaldy, 1909, *Trans. N.Z. Inst.*, vol. 41: 28.

CERTIFICATE

I certify that the votes cast on V.P. (78)17 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1136.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
6 March 1979

OPINION 1137
APHIS GOSSYPII GLOVER, 1877 (INSECTA, HEMIPTERA, HOMOPTERA) VALIDATED UNDER THE PLENARY POWERS

RULING – (1) Under the plenary powers, the specific name *circezandis* Fitch, 1870, as published in the binomen *Aphis circezandis*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The specific name *gossypii* Glover, 1877, as published in the binomen *Aphis gossypii*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2686.

(3) The specific name *circezandis* Fitch, 1870, as published in the binomen *Aphis circezandis*, and as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1059.

HISTORY OF THE CASE Z.N.(S.) 1843

An application for the validation of *Aphis gossypii* Glover, 1877, was first received from Dr Louise M. Russell *(USDA Entomology Research Division, Washington, D.C.)* on 2 April 1968 and was sent to the printer on 13 May 1968. It was published in *Bull. zool. Nom.* vol. 25: 116–119 on 27 September 1968. Public notice of the possible use of the plenary powers was given in the same part of the *Bulletin* as well as to the statutory serials and to seven entomological serials. The application was supported by Professor Clyde F. Smith *(North Carolina State University, Raleigh, North Carolina).* No adverse comment was received.

DECISION OF THE COMMISSION

On 9 April 1970 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1970)11 for or against the proposals set out in *Bull. zool. Nom.* vol. 25: 118–119. At the close of the voting period on 9 July 1970, the state of the voting was as follows:

Affirmative Votes – eighteen (18) received in the following order: Holthuis, Vokes, Bonnet, Lemche, Simpson, Jaczewski, Mayr, Tortonese, Eisenmann, Sabrosky, Evans, Brinck, Mertens, Starobogatov, Binder, Alvarado, Kraus, Ride.

Negative Vote – Melville.

Obruchev was on leave of absence. No votes were returned by do Amaral, Forest and Munroe.

The following comments were returned by members of the Commission with their voting papers:

Eisenmann: "I would suppress *Aphis circezandis* Fitch, 1870, only to the extent that it is deemed conspecific with *Aphis gossypii* Glover, 1877, leaving both names available if they are found to denote different species."

Melville: "This application is incomplete. A type specimen (presumably a neotype) should be provided for *Aphis gossypii*."

In May 1974 Dr Russell was asked to designate a neotype for *Aphis gossypii* and replied that she would ask for fresh specimens to be provided for this purpose. In 1977 she wrote to say that she had procured satisfactory examples from cotton, but in March 1979 she wrote again to say that more urgent projects prevented her from giving immediate attention to this matter but that she will proceed as soon as possible. Since it appears that a neotype can be designated within the provisions of Article 75, there seems no need to delay further the publication of the Commission's ruling.

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

circezandis, Aphis, Fitch, 1870, *Trans. New York Agric. Soc.* for 1869, vol. 29: 501–502

gossypii, Aphis, Glover, 1877, *Report of the U.S. Commissioner for Agriculture* for 1876: 36 (in Report of the Entomologist and Curator of the Museum; not seen)

CERTIFICATE

I certify that the votes cast on V.P. (1970)11 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1137.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
26 March 1979

OPINION 1138
GIRAFFA CAMELOPARDALIS AUSTRALIS RHOADS, 1896 (MAMMALIA) SUPPRESSED

RULING – (1) Under the plenary powers, the species-group name *australis* Rhoads, 1896, as published in the combination *Giraffa camelopardalis australis,* is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The species-group name *australis* Rhoads, 1896, as published in the combination *Giraffa camelopardalis australis,* and as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1060.

HISTORY OF THE CASE Z.N.(S) 1942

An application for the suppression of *Giraffa camelopardalis australis* Rhoads, 1896, was first received from Mr W.F.H. Ansell *(Department of Wildlife, Fisheries and Parks, Zambia)* and Dr Anne Innis Dagg *(University of Guelph, Ontario, Canada)* on 26 October 1970. It was sent to the printer on 18 March 1971 and published on 8 December 1971 in *Bull. zool. Nom.* vol. 28: 100–101. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to two mammalogical serials.

The object of the application was to safeguard the name *Giraffa camelopardalis reticulata* de Winton, 1899, of which Rhoads's name was taken to be a senior synonym. De Winton's name had been protected against its senior secondary homonym, *Camelopardalis giraffa reticulata* Weinland, 1863, and placed on the Official List of Specific Names with the Name Number 2430, in Opinion 944 (*Bull. zool. Nom.* vol. 27: 222–223, 1971). However, in discussion with Dr A.W. Gentry *(British Museum (Natural History), London),* the applicants concluded that *G.c. reticulata* de Winton, 1899 applied to the (northern) reticulated giraffe, and *G.c. australis* Rhoads, 1896, to the Cape giraffe, and that no synonymy existed. They accordingly withdrew their application, and a note to that effect was published in *Bull. zool. Nom.* vol. 31: 171, December 1974.

On 27 January 1975 Dr L.B. Holthuis *(Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands)* wrote to point out that the ruling in Opinion 944 protected *G.c. reticulata* de Winton,

1899, only from one threat (that posed by the senior secondary homonym *C.g. reticulata* Weinland, 1863), but did not render it inviolable from all threats. If, therefore, the application by Ansell & Dagg was not acted upon, those who held that there was after all synonymy between *G.c. australis* Rhoads, 1896, and *G.c. reticulata* de Winton, 1899, would be obliged to use the former name. In a later letter he stated that, in the interests of preserving a name already on the Official List, he had no objection to the suppression of *G.c. australis* Rhoads. These two letters were combined in a note published in *Bull. zool. Nom.* vol. 33: 136–137 alongside a note by Dr Dagg listing ten works published between 1949 and 1971 in which *G.c. reticulata* de Winton, 1899, had been used for the reticulated giraffe. In correspondence, Mr Ansell pointed out that, if *G.c. australis* Rhoads, 1896, was available for the reticulated giraffe it should be suppressed; if not, it was a junior synonym of *G. giraffa* Boddaert, 1785; in any event, he and Dr Dagg had shown the name to be a cause of confusion, so that its suppression would be justified whatever view was taken of its taxonomic position.

DECISION OF THE COMMISSION

On 5 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)18 either for (A) the proposals set out in *Bull. zool. Nom.* vol. 28: 100–101, or for (B) the grant of precedence to *G.c. reticulata* de Winton, 1899, over *G.c. australis* Rhoads, 1896. At the close of the voting period on 5 December 1978, the state of the voting was as follows:

For Alternative A – twelve (12), received in the following order: Melville, Alvarado, Eisenmann, Vokes, Brinck, Willink, Habe, Tortonese, Cogger, Binder, Corliss, Bernardi.

For Alternative B – four (4): Mroczkowski, Dupuis, Welch, Nye.

Abstention – Bayer.

Sabrosky returned a late affirmative vote. Ride was on leave of absence. No voting papers were returned by Heppell, Kraus and Starobogatov.

Dr Holthuis recorded a negative vote on both alternatives in the following terms: "In my opinion, it is perfectly clear from Rhoads's account of *G. camelopardalis* (1896: 518) (1) that he considered his own Somali specimen to belong to the northern (nominate) subspecies, (2) that in his view no name was available for the southern subspecies from the Cape of Good Hope region, and (3) that therefore he proposed the new name *australis* for this southern subspecies. The species-group name *australis* Rhoads,

1896, is thus invalid being a junior synonym of the name *giraffa* Boddaert, 1785, and there is no need to suppress this name." The Secretary replied that he found it impossible to tell, from Rhoads's account, whether his name was a senior synonym of *reticulata* de Winton or a junior synonym of *giraffa*, but that as the subject had been discussed at such length, there was good reason for the Commission to act.

The following comments were sent in by members of the Commission with their voting papers:

Eisemann: "To preserve *reticulata* already on the Official List from possible question from the relatively unknown name *australis*, I favour the suppression of *australis* Rhoads."

Bayer: "Repeated readings of Rhoads's text fail to convince me that he was referring to anything but the Cape giraffe in proposing the name *G.c. australis*, which is therefore a synonym of *G. giraffa* Boddaert, 1785. It is no threat to any name for the northern subspecies, and I fail to see any need to suppress it or to give it relative precedence over a name with which it cannot compete."

Nye: "As a general rule I consider that subjective synonyms should be dealt with under the relative precedence procedure. This application, however, deals with a very well-known group of animals, and if a majority of the votes are in favour of outright suppression, my vote should be changed to increase that majority."

Bernardi: "Ce choix me semble le plus simple et je ne tiens pas à sauvegarder un nom placé sur une 'Official List'."

ORIGINAL REFERENCE

The following is the original reference for a name placed on an Official Index by the ruling given in the present Opinion:

australis, Giraffa camelopardalis, Rhoads, 1896, *Proc. Acad. nat. Sci. Philadelphia* for 1896: 518

CERTIFICATE

I certify that the votes cast on voting paper (78)18 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1138.

R.V. MELVILLE *Secretary*
International Commission on Zoological Nomenclature
London 27 March 1979

OPINION 1139
PARAONIS GRUBE, 1873 (POLYCHAETA, PARAONIDAE): DESIGNATION OF A TYPE SPECIES UNDER THE PLENARY POWERS

RULING – (1) Under the plenary powers

(a) all designations of type species hitherto made for the nominal genus *Paraonis* Grube, 1873, are hereby set aside, and the nominal species *Aonides fulgens* Levinsen, 1884, is hereby designated type species of that genus;

(b) it is hereby ruled that the family-group name PARAONIDAE Cerruti, 1909, is to be given precedence over the family-group name LEVINSENIIDAE Mesnil & Caullery, 1898, whenever the two names are held to be synonyms.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Paraonis* Grube, 1873 (gender: feminine), type species, by designation under the plenary powers in (1)(a) above, *Aonides fulgens* Levinsen, 1884 (Name Number 2087);

(b) *Levinsenia* Mesnil, 1897 (gender: feminine), type species, by subsequent designation under the present ruling, *Aonides gracilis* Tauber, 1879 (Name Number 2088).

(3) The following names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *fulgens, Aonides,* Levinsen, 1884 (specific name of type species, by designation under the plenary powers in (1)(a) above, of *Paraonis* Grube, 1873) (Name Number 2687);

(b) *gracilis, Aonides,* Tauber, 1879 (specific name of type species of *Levinsenia* Mesnil 1897 (Name Number 2688).

(4) The following names are hereby placed on the Official List of Family-Group Names in Zoology with the endorsements and Name Numbers specified:

(a) PARAONIDAE Cerruti, 1909 (type genus *Paraonis* Grube, 1873) with an endorsement that it is to be given precedence over LEVINSENIIDAE Mesnil &

Caullery, 1898, whenever the two names are regarded as synonyms (Name Number 500);

(b) LEVINSENIIDAE Mesnil & Caullery, 1898 (as "Lévinséniens") (type genus *Levinsenia* Mesnil, 1897) with an endorsement that it is not to be given priority over PARAONIDAE Cerruti, 1909, whenever the two names are regarded as synonyms (Name Number 501).

HISTORY OF THE CASE Z.N.(S.) 1993

An application for the regulation of nomenclatural problems concerning the generic name *Paraonis* Grube, 1873, was first received from Dr V. Strelzov *(Institut Biologique de Mer, Murmansk, USSR)* and Dr P. Uschakov *(Zoological Institute, Academy of Sciences, Leningrad, USSR)* on 20 January 1972. This application, which asked for the suppression of *Paraonis* Grube, 1873, in favour of "*Paraonis* Cerruti, 1909", was sent to the printer on 13 April 1972 and published on 29 December 1972 in *Bull. zool. Nom.* vol. 29: 209–211. Support was received from Dr Gesa Hartmann-Schröder *(Zoologisches Institut und Zoologisches Museum, Hamburg, BRD).*

In June 1973 the Secretary wrote to the applicants to explore ways of conserving *Paraonis* with its original date and authorship. The applicants commented on their own proposals in *Bull. zool. Nom.* vol. 31: 9. After consultation with Dr J.D. George *(British Museum (Natural History) London)* and Dr Marian H. Pettibone *(National Museum of Natural History, Washington D.C.),* a revised application was published in *Bull. zool. Nom.* vol. 32: 146–148. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory journals and to five other serials. No comments were received on this application.

DECISION OF THE COMMISSION

On 22 November 1977 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1977)19 for or against the proposals set forth in *Bull. zool. Nom.* vol. 32: 147–148. At the close of the voting period on 22 February 1978, the state of the voting was as follows:

Affirmative Votes – seventeen (17), received in the following order: Melville, Holthuis, Eisenmann, Alvarado, Vokes, Mroczkowski, Sabrosky, Tortonese, Welch, Corliss, Starobogatov, Cogger, Dupuis, Nye, Bayer, Heppell, Ride

Negative Votes – none (0).

A late affirmative vote was received from Brinck. No voting papers were returned by Bernardi, Binder, Habe, Kraus and Willink.

Dr Ride commented with his voting paper: "*P. tenera* Grube, 1873, is a potential source of confusion and should be suppressed unless the application fails. In that case, the type specimen of *A. fulgens* Levinsen, 1883, if suitable, could be made the neotype of *P. tenera* Grube, 1873, to achieve the same end." [The object of the application – i.e. to stabilise the generic name *Paraonis* – is achieved by varying its type species; the interpretation, at specific level, of *P. tenera* then becomes irrelevant. Dr Ride's suggestion, if adopted, would make *Paraonis* and *Levinsenia* objective synonyms of one another. This would lead in turn to an objective synonymy between PARAONIDAE and LEVINSENIIDAE, but this was not the object sought by the applicants. R.V.M.]

In April 1978 the Secretary realised that the decision to settle the relative precedence of PARAONIDAE and LEVINSENIIDAE entailed a decision to place the names of the type genera of both families (and not only of PARAONIDAE), with the names of their type species, on the Official Lists. He therefore sought advice from Dr George on this point and found that it was necessary for the Commission to rule on the type species of *Levinsenia* Mesnil, 1897 – a nominal genus for which no type species had previously been fixed. He therefore invited the Commission to vote on this issue in Voting Paper (78)20, and sent the following report with that voting paper.

"THE CASE OF *PARAONIS* GRUBE, 1873: CALL FOR A SUPPLEMENTARY VOTE TO DETERMINE THE TYPE SPECIES OF *LEVINSENIA* MESNIL, 1897
(Report to accompany V.P. (78)20)

"In V.P. (77)19 the Commission voted to use its plenary powers to designate *Aonides fulgens* Levinsen, 1883, as the type species of the Polychaete genus *Paraonis* Grube, 1873, and to give the family name PARAONIDAE Cerruti, 1909, precedence over LEVINSENIIDAE Mesnil & Caullery, 1898. As a corollary to that decision, the Commission voted to place both those family names on the Official List.

"It follows from the latter decision that the names of the type genera of both families, with those of their type species, must be placed on the Official Lists of Generic and Specific Names in Zoology. This was duly voted on and approved where *Paraonis* was concerned (as a corollary to the plenary powers vote by which the type species had been designated), but the need to do likewise for *Levinsenia* was overlooked. You are now asked to vote on this issue

so as to complete the case.

"*Levinsenia* was established by Mesnil in 1897 (*Bull. sci. France Belgique*, vol. 30: 93) with two included species: *Aonides gracilis* Tauber, 1879, *Annulata Danica*, vol. 1: 115, and *Aonides fulgens* Levinsen, 1884, *Videnskab. Medd. naturh. Forening København* for 1883, 1884: 101–103. (The date of this name was incorrectly given as 1883 in the application). Neither was designated as type species. Mr Alex Muir *(British Museum, Natural History)*, guided by Dr David George, has made a thorough search of the literature and has not found any subsequent designation of a type species for the genus. Since *Aonides fulgens* Levinsen has been designated as type species of *Paraonis*, it would obviously be appropriate to designate *Aonides gracilis* Tauber, 1879, as type species of *Levinsenia*, and I invite you to vote for or against that proposition on the accompanying voting paper."

The voting period on V.P. (78)20 ran from 5 September 1978 to 5 December 1978. At the close of the period the state of the voting was as follows:

Affirmative Votes – sixteen (16) received in the following order: Melville, Alvarado, Mroczkowski, Eisenmann, Vokes, Brinck, Willink, Tortonese, Cogger, Binder, Bayer, Dupuis, Corliss, Nye, Welch, Bernardi

Negative Vote – Holthuis.

Ride and Sabrosky were on leave of absence. No votes were returned by Habe, Heppell, Kraus and Starobogatov.

Dr Holthuis commented with his voting paper: "By selecting *A. fulgens* Levinsen as type species of *Levinsenia* Mesnil, 1897, the latter falls as a junior objective synonym of *Paraonis* Grube, 1873, which is an elegant way of making the synonymy of the two names absolute." [This suggestion would have the same effect as that made by Dr Ride on V.P. (77)19 and discussed above – namely, of making PARAONIDAE and LEVINSENIIDAE objective synonyms of one another. This was not the object sought by the applicants. R.V.M.]

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists by the ruling given in the present Opinion:

fulgens, Aonides, Levinsen, 1884, *Videnskab. Medd. naturh. Forening København* for 1883: 101–103

gracilis, Aonides, Tauber, 1879, *Annulata Danica*, vol. 1: 115

Levinsenia Mesnil, 1897. *Bull. sci. France Belgique*, vol. 30: 93

LEVINSENIIDAE Mesnil & Caullery, 1898, *Bull. sci. France Belgique,* vol. 31: 137
Paraonis Grube, 1873, *Jber. schles. Ges. vaterl. Kult.*, vol. 50: 57
PARAONIDAE Cerruti, 1909, *Mitt. zool. Stn Neapel,* vol. 19: 503.

CERTIFICATE

I certify that the votes cast on Voting Papers (77)19 and (78)20 were cast as set out above, that the proposal contained in the former voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1139.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
30 March 1979

OPINION 1140
SESARMA RUBRIPES RATHBUN, 1897 (CRUSTACEA DECAPODA) GIVEN PRECEDENCE OVER *SESARMA TRAPEZIUM* DANA, 1852, UNDER THE PLENARY POWERS

RULING – (1) Under the plenary powers it is hereby ruled that the specific name *rubripes* Rathbun, 1897, as published in the binomen *Sesarma rubripes,* is to be given precedence over the specific name *trapezium* Dana, 1852, as published in the binomen *Sesarma trapezium* whenever those two names are regarded as synonyms.

(2) The specific name *rubripes* Rathbun, 1897, as published in the binomen *Sesarma rubripes,* is hereby placed on the Official List of Specific Names in Zoology with an endorsement that it is to be given precedence over the specific name *trapezium* Dana, 1852, as published in the binomen *Sesarma trapezium,* whenever those two names are regarded as synonyms (Name Number 2689).

(3) The specific name *trapezium* Dana, 1852, as published in the binomen *Sesarma trapezium,* is hereby placed on the Official List of Specific Names in Zoology with an endorsement that it is not to be given priority over the specific name *rubripes* Rathbun, 1897, as published in the binomen *Sesarma rubripes,* whenever those two names are regarded as synonyms (Name Number 2690).

HISTORY OF THE CASE Z.N.(S.) 2016

An application for the suppression under the plenary powers of *Sesarma trapezium* Dana, 1852, was first received from Dr Lawrence G. Abele (then of the *School of Marine and Atmospheric Science, University of Miami, Miami, Florida 33149)* on 24 July 1972. In correspondence, the applicant stated that Dana's name had been cited in only three works other than mere lists of names, whereas its junior synonym, *Sesarma rubripes* Rathbun, 1897, had been cited in connexion with specimens on seven occasions. The application was sent to the printer on 14 January 1974 and published on 31 July 1974 in *Bull. zool. Nom.* vol. 31: 49–50. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to a crustacean serial. No comment was received.

In November 1977 the Secretary proposed to the applicant the use of the "relative precedence" procedure in this case, and the applicant concurred.

DECISION OF THE COMMISSION

On 5 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)21 for or against the proposals set out in *Bull. zool. Nom.*, vol. 31: 50, but in terms of the "relative precedence" procedure. At the close of the voting period on 5 December 1978 the state of the voting was as follows:

Affirmative Votes – fifteen (15), received in the following order: Holthuis, Melville, Alvarado, Mroczkowski, Eisenmann, Vokes, Brinck, Willink, Tortonese, Binder, Corliss, Habe, Nye, Welch, Bernardi

Negative Votes – three (3): Cogger, Bayer, Dupuis.

Ride and Sabrosky were on leave of absence. No votes were returned by Heppell, Kraus and Starobogatov.

The following comments were sent in by members with their voting papers:

Cogger: "Although the applicant states that '. . . the species *Metasesarma trapezium* has been mentioned by seven authors in eight different works . . .' he neither cites these references nor indicates the nature of their significance. On the other hand, the number of references cited for *M. rubripes* is only seven. I believe, therefore, that the case for suppression is inadequate and accordingly vote against the proposal."

Bayer: "I have been informed by a senior specialist in Decapod Crustacea that the quality of Dana's illustrations (1852) is insufficient to permit any reliable decision about the identity of *S. trapezium* and *M. rubripes.* The other evidence is purely circumstantial, so *S. trapezium* can be considered no more than a *species inquirenda,* not a senior synonym of *M. rubripes.* Moreover, the species involved are of little concern outside of the taxonomic field, so no great body of general usage is threatened even if *S. trapezium* should eventually prove to be a senior synonym of *M. rubripes.*"

Bernardi: "Je vote 'pour' parce que le type de *trapezium* est perdu et la localité-type inexacte."

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official List by the ruling given in the present Opinion:

rubripes, Sesarma, Rathbun, 1897, *Proc. biol. Soc. Washington,* vol. 11: 89–92

trapezium, Sesarma, Dana, 1852, Crustacea, *in U.S. Exploring Expedition under the command of Charles Wilkes, U.S.N.,* vol. 13 (1): 354

CERTIFICATE

I hereby certify that the votes cast on V.P. (78)21 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1140.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
30 March 1979

OPINION 1141
DONACILLA BLAINVILLE, 1819 (BIVALVIA) SUPPRESSED; *DONACILLA* PHILIPPI, 1836, *MESODESMA* DESHAYES, 1832, AND *SEMELE* SCHUMACHER, 1817 (BIVALVIA) ADDED TO THE OFFICIAL LIST

RULING – (1) Under the plenary powers, the generic name *Donacilla* Blainville, 1819, and all other uses of that name prior to the work of Philippi, 1836, is hereby suppressed for the purposes of both the Law of Priority and the Law of Homonymy.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Donacilla* Philippi, 1836 (gender: feminine), type species, by original designation, *Donacilla lamarckii* Philippi, 1836 (Name Number 2089);

(b) *Mesodesma* Deshayes, [1832] (gender: neuter), type species, by subsequent designation by Anton, [1838] *Mactra donacia* Lamarck, 1818 (Name Number 2090);

(c) *Semele* Schumacher, 1817 (gender: feminine), type species, by monotypy, through Article 70b, *Semele reticulata* Schumacher, 1817 (Name Number 2091).

(3) The following names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *cornea* Poli, 1795, as published in the binomen *Mactra cornea* (Name Number 2691);

(b) *donacia* Lamarck, 1818, as published in the binomen *Mactra donacia* (specific name of type species of *Mesodesma* Deshayes, [1832] (Name Number 2692);

(c) *proficua* Pulteney, 1799, as published in the binomen *Tellina proficua* (Name Number 2693).

(4) The following name is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number specified:

(a) *Donacilla* Blainville, 1819, and all other uses of, prior to the work of Philippi, 1836 (Name Number 2110).

HISTORY OF THE CASE Z.N.(S.) 1959

On 14 January 1971 an application was received from Dr A.G. Beu *(Geological Survey of New Zealand)* for the designation

of type species for *Donacilla* Blainville, 1818, and *Amphidesma* Lamarck, 1818. It was sent to the printer on 18 March 1971 and published on 8 December 1971 in *Bull. zool. Nom.* vol. 28: 121–123. No use of the plenary powers was involved.

Objections to the proposal by Dr Louise de Rooij-Schuiling *(Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands)* were published in *Bull. zool. Nom.* vol. 29: 193. A reconciliation of her approach with that of Dr Beu was published by the Secretary in *Bull. zool. Nom.* vol. 31: 111–112. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to two malacological serials. The proposals were supported by Dr Harald A. Rehder *(National Museum of Natural History, Washington D.C. 20560).* No adverse comment was received.

DECISION OF THE COMMISSION

On 5 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)19 for or against the proposals set out in *Bull. zool. Nom.* vol. 31: 111–112. At the close of the voting period on 5 December 1978 the state of the voting was as follows:

Affirmative Votes – seventeen (17) received in the following order: Holthuis, Melville, Alvarado, Eisenmann, Mroczkowski, Vokes, Brinck, Willink, Tortonese, Cogger, Binder, Bayer, Corliss, Habe, Nye, Welch, Bernardi

Negative Vote – Dupuis.

Sabrosky sent in a late voting paper and abstained. Ride was on leave of absence. No votes were returned by Heppell, Kraus and Starobogatov.

The following comments were sent in by members of the Commission with their voting papers:

Holthuis: "I should prefer to add in para 6(1) on p. 111, after "Blainville, 1819", "and all uses of this name prior to the publication of *Donacilla* Philippi, 1836." [This was taken into account in drafting the present ruling. R.V.M.]

Dupuis: "L'interprétation de Iredale (1914: 490), selon laquelle l'espèce *donacilla* Lamarck, 1818 est le type par tautonymie de *Amphidesma* Lamarck, 1818, n. lat. nov. pro Donacille Lmk., 1812 n. gall., me paraît conforme à l'histoire. Toutes les autres propositions – suppressions, mises à l'Index – sont des simplifications qui font disparaître l'histoire. J'aurais préféré que l'on utilise les pleins pouvoirs pour confirmer l'interprétation de Iredale et rejeter la désignation de Children, 1823."

Nye: "I suggest that the words "and all usages of this name prior to *Donacilla* Philippi, 1836", already present by implication, should, if this application is approved, be incorporated into the ruling when dealing with the suppression of *Donacilla* Blainville, 1819". [This was taken into account in drafting the present ruling. R.V.M.]

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

cornea, Mactra, Poli, 1795, *Testacea utriusque Siciliae,* vol. 1: 73–74

donacia, Mactra, Lamarck, 1818, *Hist. nat. anim. s. vert.,* vol. 5: 479

Donacilla Blainville, 1819, *Dict. sci. nat.,* vol. 13: 429

Donacilla Phillipi, 1836, *Enum. moll. Siciliae,* vol. 1: 37

Mesodesma Deshayes, [1832], *Ency. méth.* (Vers), vol. 2 (2): 441

proficua, Tellina, Pulteney, 1799, *Catalogues of Birds, Shells and more rare Plants of Dorsetshire* (London): 29

Semele Schumacher, 1817, *Essai vers test.:* 53, 165

The following is the reference to a subsequent designation of type species accepted in the present ruling: of *Mactra donacia* Lamarck, 1818 as type species of *Mesodesma* Deshayes, [1832], by Anton, [1838], *Verz. Conch. Samml. Anton:* 3. (The date of this work is taken from Cernohorsky, 1978, *Veliger,* vol. 20 (3): 299.)

CERTIFICATE

I hereby certify that the votes cast on V.P. (78)19 were cast as set out above, that the proposal contained in that voting paper has been duly accepted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1141.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
3 April 1979

OPINION 1142
FAMILY-GROUP NAMES BASED ON *PLATYSTOMA* MEIGEN, 1803, GIVEN PRECEDENCE OVER THOSE BASED ON *ACHIAS* FABRICIUS, 1805 (DIPTERA)

RULING – (1) Under the plenary powers, it is hereby ruled that family-group names based on *Platystoma* Meigen, 1803, are to be given precedence over family-group names based on *Achias* Fabricius, 1805, whenever those two genera are placed in the same family-group taxon.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Platystoma* Meigen, 1803 (gender: neuter), type species, by monotypy, *Musca seminationis* Fabricius, 1775 (Name Number 2092);

(b) *Achias* Fabricius, 1805 (gender: masculine), type species, by monotypy, *Achias oculatus* Fabricius, 1805 (Name Number 2093).

(3) The following names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *seminationis* Fabricius, 1775, as published in the binomen *Musca seminationis* (specific name of type species of *Platystoma* Meigen, 1803) (Name Number 2694);

(b) *oculatus* Fabricius, 1805, as published in the binomen *Achias oculatus* (specific name of type species of *Achias* Fabricius, 1805) (Name Number 2695).

(4) The following names are hereby placed on the Official List of Family-Group Names in Zoology with the Name Numbers and endorsements specified:

(a) PLATYSTOMATIDAE Schiner, 1862 (as "Platystominae") (type genus *Platystoma* Meigen, 1803) (Name Number 502), with an endorsement that it is to be given precedence over ACHIDAE Fleming, 1821 whenever *Platystoma* Meigen, 1803, and *Achias* Fabricius, 1805, are placed in the same family-group taxon;

(b) ACHIDAE Fleming, 1821 (as "Achiasidae") (type genus *Achias* Fabricius, 1805) (Name Number 503) with an endorsement that it is not to be given priority over PLATYSTOMATIDAE Schiner, 1862, whenever

Platystoma Meigen, 1803, and *Achias* Fabricius, 1805, are placed in the same family-group taxon.

HISTORY OF THE CASE Z.N.(S.) 2053

An application for the suppression of the family name ACHIDAE Fleming, 1821 was first received from Mr George C. Steyskal *(Systematic Entomology Laboratory USDA, c/o U.S. National Museum, Washington D.C. 20560, U.S.A.)* and Dr D.K. McAlpine *(Australian Museum, Sydney 2000, Australia)* on 28 September 1973. After an exchange of correspondence it was sent to the printer on 14 January 1974 and published on 31 July 1974 in *Bull. zool. Nom.* vol. 31: 59–61. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to seven entomological serials.

Dr Holthuis pointed out that no family-group name can be suppressed unless the name of its type genus is suppressed at the same time. He suggested that the applicants should ask for family-group names based on *Platystoma* to be given precedence over family-group names based on *Achias*, and his comment was published in *Bull. zool. Nom.* vol. 31: 177. The applicants did as he suggested in the following note, which was circulated with the voting paper referred to below.

"Of course Dr Holthuis is correct in pointing out that as long as a generic name is available it may be used as the basis of a family-group name of some rank or other (a zoological consideration). Therefore what we are seeking is really the preference of *Platystoma* over *Achias* as the basonym for any family-group taxon in which both genera are included. At any rank in which *Achias* and *Platystoma* are considered to belong to separate named family-group taxa, those taxa may be typified by those genera. We therefore agree to amend and complete our proposals and to ask the Commission:

(1) to use its plenary powers to rule that family-group names based on *Platystoma* Meigen, 1803, are to be given precedence over family-group names based on *Achias* Fabricius, 1805, whenever those two genera are placed in the same family-group taxon;

(2) to place on the Official List of Generic Names in Zoology

(a) *Platystoma* Meigen, 1803, *(Illiger's) Magazin für Insektenkunde,* vol. 2: 277 (gender: neuter) (type species, *Musca seminationis* Fabricius, 1775, *Systema Entomologiae:* 786, by monotypy);

(b) *Achias* Fabricius, 1805, *Systema Antliatorum:* 247 (gender, masculine) (type species, *Achia oculatus* Fabricius, 1805, loc. cit., by monotypy);

(3) to place on the Official List of Specific Names in Zoology

(a) *seminationis, Musca,* Fabricius, 1775, *Systema Entomologiae:* 786;

(b) *oculatus, Achias,* Fabricius, 1805, *Systema Antliatorum:* 247."

"The citation by Becker (1905, *Kat. Paläarkt. Dipt.* vol. 4: 103) of *"seminationis* L. Fauna Suec., 1874. *[Musca]* (1766)" is erroneous, apparently for *germinationis,* cited further on under *Opomyza* correctly. This error unfortunately has been taken up by a few later authors."

The action proposed implies the further action incorporated in paragraph (4) of the present ruling.

DECISION OF THE COMMISSION

On 27 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)22 for or against the proposals set out in the note quoted above. At the close of the voting period on 27 December 1978 the state of the voting was as follows:

Affirmative Votes – twenty (20) received in the following order: Melville, Mroczkowski, Holthuis, Brinck, Eisenmann, Alvarado, Vokes, Willink, Habe, Tortonese, Binder, Corliss, Welch, Bayer, Cogger, Kraus, Nye, Sabrosky, Dupuis (for proposal (1) only), Bernardi

Negative Votes – two (2): Heppell, Dupuis (against proposals (2) and (3) only).

Ride was on leave. No vote was returned by Starobogatov.

The following comments were sent in by members of the Commission with their voting papers:

Heppell: "I find it very difficult to vote on such a case. If we adhere to the rules and favour the little-used ACHIDAE there would be discouragement to other workers thinking of bringing similar cases to the Commission; names in general use would continue to be used, and the prior names would be quietly ignored. If we grant the applicants' request we accept that this case is one of very many where an exception to the rule should be made in conformity with general usage, and possibly open the gates to a flood of similar applications, each of which, if granted, reduces the value of the rule. Holthuis has pointed out one problem with family names – that they cannot be suppressed without limiting taxono-

mic freedom. Among other associated problems are the difficulty of ascertaining the earliest usage of family names, the well-established practice (not authorised by the Code) of basing the family name on the oldest included generic name, and the use of family names in a taxonomic sense often before the type genus was objectively defined by fixation of its type species (Article 41). Unfortunately, because names on the Official Lists have no enhanced status, the addition of PLATYSTOMATIDAE to the list would not automatically give it precedence over ACHIDAE, which is all the applicants require from the Commission. The Commission has the option here of adding both names to the Official List, with a grant of precedence to the junior name, but this is an inelegant solution that tends to confuse zoologists not familiar with nomenclatural sophistry.

"The present rule applying priority to family names has been in force for twenty years, during which time I believe the consequent changes in family-group nomenclature have either been ignored or not realised. When they have been realised, applications have been made to suppress the senior unused name in favour of the junior name in current use, or to grant precedence to the latter over the former. It seems to me to be time to go back to the zoological fraternity and ask whether provisions for family-group nomenclature should continue to be incorporated in the Code. If the answer is still in the affirmative, then the Commission should rigorously vote against such applications as the present one, only allowing the rules to be waived in exceptional circumstances. There seems to me to be no sense in keeping provisions in the Code for historical purposes if they are not observed by responsible zoologists because of practical difficulties. Even in 1956 H.B. Baker (Family names in Pulmonata, *Nautilus,* vol. 69: 128–139) was aware of the problems inherent in the proposed changes to the Code, and concluded: '... the rule of priority, if applied also to families, would favor the careless splitter, and establish names impetuously applied to aberrant and isolated forms'. In voting against this application I feel that the proposals as resubmitted are subordinate to the sole desired end, namely that PLATYSTOMATIDAE be confirmed as the valid name for the family subjectively synonymous with ACHIDAE. If the Commission were to accept the principle that names on the Official Lists should have automatic precedence over any synonyms, objective or subjective, not on the Lists, this case could be effectively dealt with merely by placing PLATYSTOMATIDAE on the Official List."

Nye: "Although I support the aim of the proposals, they are still not complete. The names PLATYSTOMATIDAE Schiner, 1862, and ACHIDAE Fleming, 1821, should both be placed on the

Official List with annotations giving the former precedence over the latter." [This has been taken into account in drafting the present ruling. R.V.M.]

ORIGINAL REFERENCES

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

Achias Fabricius, 1805, *Syst. Antl:* 247

ACHIIDAE Fleming, 1821, *Philos. zool.:* 55 (as "Achiasidae")

oculatus, Achias, Fabricius, 1805, *Syst. Antl.:* 247

Platystoma Meigen, 1803, *Illiger's Mag. Insektenk.,* vol. 2: 277

PLATYSTOMATIDAE Schiner, 1862, *Wien. ent. Monatschr.,* vol. 6: 151

seminationis, Musca, Fabricius, 1775, *Syst. Ent.:* 786.

CERTIFICATE

I hereby certify that the votes cast on V.P. (78)22 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1142.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
3 April 1979

OPINION 1143
KERRICHIELLA ROSANOV, 1965 (HYMENOPTERA): DESIGNATION OF A TYPE SPECIES UNDER THE PLENARY POWERS

RULING – (1) Under the plenary powers, all fixations of type species for the nominal genus *Kerrichiella* Rosanov, 1965, are hereby set aside and the nominal species *Thysanus coleoptratus* Kerrich, 1953, is hereby designated as type species of that genus.

(2) The generic name *Kerrichiella* Rosanov, 1965 (gender: feminine), type species, by designation under the plenary powers in (1) above, *Thysanus coleoptratus* Kerrich, 1953, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2094.

(3) The specific name *coleoptratus* Kerrich, 1953, as published in the binomen *Thysanus coleoptratus* (specific name of type species of *Kerrichiella* Rosanov, 1965) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2696.

HISTORY OF THE CASE Z.N.(S.) 2063

An application for the use of the plenary powers to vary the type species of *Kerrichiella* Rosanov, 1965, was first received from Dr B.R. Subba Rao *(Commonwealth Institute of Entomology, London)* on 28 February 1974. It was sent to the printer on 5 April 1974 and published on 31 December 1974 in *Bull. zool. Nom.* vol. 31: 221–222. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to seven entomological serials.

The application was supported by Dr David Rosen *(Hebrew University of Jerusalem),* Dr Oswald Peck and Dr Carl M. Yoshimoto *(Biosystematics Research Institute, Ottawa, Canada),* Dr J.S. Noyes *(British Museum (Natural History) London)* and Dr Z. Boucek *(Commonwealth Institute of Entomology, London).* No adverse comment was received.

DECISION OF THE COMMISSION

On 27 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)24 for or against the proposals set out in *Bull. zool. Nom.* vol. 31: 221. At the close of the voting period on 27 December 1978 the state of the voting was as follows:

Affirmative Votes – twenty-one (21), received in the

following order: Melville, Holthuis, Brinck, Eisenmann, Alvarado, Mroczkowski, Vokes, Willink, Habe, Tortonese, Binder, Corliss, Welch, Heppell, Ride, Bayer, Kraus, Nye, Sabrosky, Dupuis, Bernardi

Negative Votes – none (0).

Cogger abstained from voting. No voting paper was returned by Starobogatov.

The following comments were sent in by members of the Commission with their voting papers:

Ride: "My vote is conditional upon the Secretary ascertaining that there is no usage of the generic name *Kerrichiella* in the sense required by *S. giraulti* Crawford. If there is such usage, the current application would, if successful, result in a transfer of names, and the Commission should be asked to adopt the solution provided by Article 70a(iii) rather than 70a(i)." [Dr Subba Rao replied that he knew of no usage of *Kerrichiella* other than in the sense of his application. R.V.M.]

Cogger: "I abstain from voting on the grounds that the application does not provide the information necessary to judge the case in terms of Article 70a. The application of this Article is to ensure that a type species is chosen that will ' . . . best serve stability and universality of nomenclature'. This issue is not addressed by the applicant, who provides no information on current usage."

ORIGINAL REFERENCES

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

coleoptratus, Thysanus, Kerrich, 1953, *Bull. ent. Res.* (London), vol. 44: 802

Kerrichiella Rosanov, 1965, *Ent. Obozr. Moscow,* vol. 44: 869, 878, 880

CERTIFICATE

I hereby certify that the votes cast on V.P. (78)24 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1143.

R.V. MELVILLE *Secretary*
International Commission on Zoological Nomenclature
London 4 April 1979

OPINION 1144
PHLOEOTRIBUS (COLEOPTERA: SCOLYTIDAE) RULED TO BE A JUSTIFIED EMENDATION OF *PHLOIOTRIBUS* LATREILLE, 1796

RULING – (1) Under the plenary powers it is hereby ruled that the spelling *Phloeotribus* (first published by Latreille, 1804) is a justified emendation of *Phloiotribus* Latreille, 1796.

(2) The generic name *Phloeotribus* Latreille, 1796 validated under the plenary powers in (1) above (gender: masculine), type species through Article 67e, *Scolytus scarabaeoides* Bernard, 1788, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2095.

(3) The specific name *scarabaeoides* Bernard, 1788, as published in the binomen *Scolytus scarabaeoides* (specific name of type species of *Phloeotribus* Latreille, 1796) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2697.

(4) The generic name *Phloiotribus* Latreille, 1796 (an incorrect original spelling by virtue of the ruling under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 2111.

HISTORY OF THE CASE Z.N.(S.) 2068

An application for the conservation of the name *Phloeotribus* Latreille, 1804, was first received from Dr Stephen L. Wood *(Brigham Young University, Provo, Utah 84601, USA)* on 29 April 1974. After an exchange of correspondence it was sent to the printer on 19 November 1974 and published on 27 June 1975 in *Bull. zool. Nom.* vol. 32: 122–123. During the preparation of the case, criticism by Prof. Dr Karl Schedl *(University of Lienz, Austria)* was taken into account and support was received from Professor Ant. Pfeffer *(Prague, Czechoslovakia)* and Dr J.J. Menier *(Muséum national d'Histoire naturelle, Paris)*.

Public notice of the possible use of the plenary powers in the case was given in the *Bulletin* when the application was published and was given to the statutory serials and to seven entomological serials. Dr Holthuis suggested *(Bull. zool. Nom.* vol. 32: 208–9) that the conservation of *Phloeotribus* could best be achieved by a ruling that it was a justified emendation of *Phloiotribus* Latreille, 1796, since it would then take the priority of the latter. This

suggestion was accepted by the applicant. No other comment was received.

DECISION OF THE COMMISSION

On 27 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)27 for or against the proposals set out in *Bull. zool. Nom.* vol. 32: 123 as modified on : 208. At the end of the voting period on 27 December 1978 the state of the voting was as follows:

Affirmative Votes – twenty-one (21) received in the following order: Melville, Holthuis, Mroczkowski, Brinck, Eisenmann, Alvarado, Vokes, Willink, Habe, Tortonese, Binder, Corliss, Welch, Heppell, Bayer, Ride, Cogger, Kraus, Nye, Sabrosky, Bernardi

Negative Votes – none (0).

Dupuis abstained. No vote was returned by Starobogatov.

Professor Dupuis explained that he abstained because, in his view, the author of *Phloeotribus* was not Latreille, but Illiger, *Mag. Insektenkunde*, vol. 3: 108. The Secretary held that Illiger had merely erroneously quoted the spelling of Latreille's name, and Professor Holthuis likewise concluded that *Phloeotribus* appeared to be an erroneous subsequent spelling rather than an emendation. As such, it would have no status in nomenclature unless the Commission were to give it such status under its plenary powers; its original authorship would then be of no importance, because as from the Commission's ruling, it would have the authorship and date attributed to it by that ruling.

ORIGINAL REFERENCES

The following are the original references for names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

Phloeotribus Illiger, 1804, Illiger's *Mag. Insektenk.*, vol. 3: 108

Phloiotribus Latreille, 1796, *Précis Car. Ins.*: 50

scarabaeoides, Scolytus, Bernard, 1788, *Mém. pour servir à l'Hist. nat. de Provence*, vol. 2: 271. [Original not seen]

CERTIFICATE

I hereby certify that the votes cast on V.P. (78)27 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers and that the decision so taken, being the decision of the International Com-

mission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1144.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
6 April 1979

Readers of the Bulletin are reminded that the only regular source of income to finance the work of the Commission comes from sales of this periodical, and that this is insufficient to meet the needs of zoologists for the services provided by the Commission and to maintain the office at an efficient level. Help in the form of donations and bequests will, therefore, be received with gratitude.

The International Trust for Zoological Nomenclature wishes to express its appreciation of the facilities provided by the Trustees of the British Museum (Natural History) for the Secretariat of the Commission.

© 1979 THE INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
Printed in England by INPRINT OF LUTON (Designers & Printers) LTD.

Volume 36, Part 3
pp. 135 - 192

ISSN 0007 - 5167
25 October 1979

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

CONTENTS

Page

Notices prescribed by the International Congress of Zoology:
1. Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the *Bulletin of Zoological Nomenclature*. 135
2. Notice of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases 135
3. List of new applications 136

Obituaries: Mr. N.D. Riley, C.B.E. 137
Dr. C.L. Hubbs 137

(Contents continued on page xi)

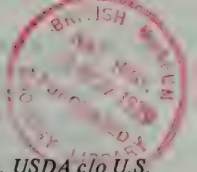
LONDON

International Trust for Zoological Nomenclature
c/o British Museum (Natural History)
Cromwell Road, London, SW7 5BD

Price £6.25

(All rights reserved)

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE



A. The Officers of the Commission

President: Dr. C.W. SABROSKY *(Systematic Entomology Lab., USDA c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.).*

Vice-President: Prof. Per BRINCK *(Ecology Building, University of Lund, S-223 62, Lund, Sweden).*

Secretary: Mr. R.V. MELVILLE *(British Museum (Natural History), Cromwell Road, London SW7 5BD).*

Assistant Secretary: Dr. I.W.B. NYE *(British Museum (Natural History), Cromwell Road, London SW7 5BD).*

B. The Members of the Commission

(Arranged in order of election or of most recent re-election)

Prof. T. HABE *(National Science Museum, 3-23-1 Hyakunin-cho, Shinjuku-ku, Tokyo 160, Japan)* (20 February 1972) **Marine Biology**

Mr. David HEPPELL *(Department of Natural History, Royal Scottish Museum, Edinburgh EH1 1JF, Scotland)* (20 February 1972) *(Councillor)* **Mollusca**

Dr. I.W.B. NYE *(British Museum (Natural History), Cromwell Road, London SW7 5BD)* (20 February 1972) *(Assistant Secretary)* **Lepidoptera**

Prof. A. WILLINK *(Universidad Nacional de Tucumân, Instituto Miguel Lillo, Miguel Lillo 205, 4000 Tucumán, Argentina)* (20 February 1972) **Neotropical Hymenoptera**

Prof. Enrico TORTONESE *(Istituto Zooprofilattico, Lungo Bisagno Dalmazia 45A, 16141, Genova, Italy)* (30 September, 1972) **Pisces; Echinodermata**

Prof. Per BRINCK *(Ecology Building, University of Lund, S-223 62, Lund, Sweden)* (30 September 1972) *(Vice-President)* **Arthropoda; Ecology**

Prof. Dr. Raphael ALVARADO *(Departamento de Zoologia, Facultad de Ciencias, Universidad de Madrid, Madrid 3, Spain)* (30 September 1972) **Echinoidea; Asteroidea**

Prof. E. BINDER *(Muséum d'Histoire Naturelle, CH 1211 Geneva 6, Switzerland)* (30 September 1972) **Mollusca**

Prof. Harold E. VOKES *(University of Tulane, Department of Geology, New Orleans, Louisiana 70118, U.S.A.)* (30 September 1972) **Mollusca**

Dr. L.B. HOLTHUIS *(Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands)* (30 September 1972) *(Councillor)* **Crustacea**

Dr. G. BERNARDI *(Muséum National d'Histoire Naturelle, 45 bis rue de Buffon, 75005, Paris, France)* (30 September 1972) **Lepidoptera**

Dr. C. DUPUIS *(Muséum National d'Histoire Naturelle, 57 rue Cuvier, 75231, Paris, Cedex 05 France)* (30 September 1972) **Heteroptera**

Dr. M. MROCZKOWSKI *(Instytut Zoologiczny, Polska Akademia Nauk, ul. Wilcza 64, Warsaw, Poland)* (14 March 1975) **Coleoptera**

Prof. H.E. WELCH *(Department of Zoology, University of Manitoba, Winnipeg, Manitoba, R3T 2N2 Canada)* (17 March 1976) **Nematoda**

Prof. Dr. Otto KRAUS *(Zoologisches Institut und Zoologisches Museum, 2000 Hamburg 13, Germany)* (29 September 1976) **Arachnida, Myriapoda**

Dr. W.D.L. RIDE *(Bureau of Flora and Fauna, Department of Science and the Environment, P.O. Box 449, Woden, A.C.T. 2606, Australia)* (29 September 1976) *(Councillor)* **Mammalia; Recent and Fossil**

Dr. Curtis W. SABROSKY *(Systematic Entomology Lab., USDA c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.)* (29 September 1976) *(President)* **Diptera**

Dr. H.G. COGGER *(Australian Museum, Sydney 2000, N.S.W. Australia)* (29 September 1976) **Reptilia; E D P Methods**

Prof. Dr. Gerhard HAHN *(Fachbereich Geowissenschaften, Universitätsgebiet Lahnberge, 3550 Marburg, BRD)* (27 December 1978) **Palaeontology**

Prof. Dr. O. HALVORSEN *(Institute of Biology and Geology, University of Tromsö, P.O. Box 790, N-9001 Tromsö, Norway)* (27 December 1978) **Parasitology**

Dr. V.A. TRJAPITZIN, *(Zoological Institute, Academy of Sciences, Leningrad B-164, USSR)* (27 December 1978) **Entomology**

Dr. F.M. BAYER *(U.S. National Museum, Washington, D.C. 20560, U.S.A.)* (23 August 1979) **Octocorallia; Systematics**

Prof. John O. CORLISS *(University of Maryland, College Park, Maryland 20742, U.S.A.)* (23 August 1979) **Protozoa; Systematics**

Mr. R.V. MELVILLE *(British Museum (Natural History), Cromwell Road, London SW7 5BD)* (23 August 1979) *(Secretary)* **Palaeontology**

Dr. Y.I. STAROBOGATOV *(Zoological Institute, Academy of Sciences, Leningrad B-164, U.S.S.R.)* (23 August 1979) **Mollusca, Crustacea**

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE

A. The Members of the Trust

Sir Peter E. Kent, F.R.S. *(Chairman)*
Dr. F.G.W. Jones *(Secretary and Managing Director)*
Prof. D. Curry, F.G.S.
Sir Arthur Drew, K.C.B.
Mon. J. Forest
Col. Francis J. Griffin, O.B.E.
Dr. R.H. Hedley
Dr. N.E. Hickin
Dr. L.B. Holthuis
Prof. Dr. O. Kraus
Prof. O.W. Richards, F.R.S.
Sir Eric Smith, F.R.S.
Mr. C.W. Wright, C.B.
Dr. G.F. deWitte

B. The Officers of the Trust

Mr. R.V. Melville, M.Sc. *(Scientific Controller)*
Mr. R.J.A. Lever *(Assistant Zoologist)*

CONTENTS
(continued from front cover)

Page

Comments

Pleurocera Rafinesque, 1818: proposed designation of type species (J.P.E. Morrison, J. Rosewater, A.H. Clarke, C.B. Stein, Secretary's observations on Dr. Stein's comments, G.M. Davis) 139
Pectinaria Lamarck, 1818: proposals on generic name (K. Banse) 146
Conus fergusoni G.B. Sowerby III, 1873: proposed validation (W.O. Cernohorsky) 147

Opinions

Opinion 1145. *Dryocoetes* Eichhoff, 1864 (Coleoptera, SCOLYTIDAE): conserved under the plenary powers 149
Opinion 1146. *Xyleborus* Eichhoff, 1864 (Coleoptera, SCOLYTIDAE): conserved under the plenary powers 151

New and Revived Cases

MEROPIDAE (Aves): proposed amendment of Entry in Official List of Family-Group Names in Zoology (P.S. Tomkovich & G.N. Kashin) 154
Sciaena nibe Jordan & Thompson, 1911 (Pisces): proposed conservation of the specific name *nibe* by use of the plenary powers. (E. Trewavas) 155
Panopeus H. Milne Edwards, 1834 (Crustacea, Decapoda): proposed designation of type species under the plenary powers (L.B. Holthuis) 158
Anaspis Müller, 1764; *Luperus* Müller, 1764; *Lampyris* Müller, 1764; and *Clerus* Müller, 1764 (Insecta, Coleoptera): proposed designation of type species (H. Silfverberg) 161
Ptilium Gyllenhal, 1827 and *Ptenidium* Erichson, 1845 (Insecta, Coleoptera): proposed conservation by use of plenary powers (H. Silfverberg) 167
Chrysomela flavicornis Suffrian, 1851 and *C. tibialis* Suffrian, 1851 (Insecta, Coleoptera): proposed conservation by use of the plenary powers (H. Silfverberg) .. 171
Edwardsia Costa, 1834 (Arthropoda, Crustacea): proposed suppression with conservation of *Edwardsia* de

Page

Quatrefages, 1841 and EDWARDSIIDAE Andres, 1881 (Coelenterata, Actiniaria) (R.B. Williams) 175

Muscicapa ruficauda Swainson, 1838 (Aves, MUSCICAPIDAE): proposed designation of neotype by use of plenary powers (C.W. Benson) 180

Polynoe Savigny, 1818 (Annelida, Polychaeta): proposed use of plenary powers to designate a type species (A.I. Muir) 187

Rhodesiella plumigera (Loew, 1860) (Insecta, Diptera): proposed suppression by use of plenary powers (C.W. Sabrosky) 191

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 36, part 3 (pp. 135 - 192) 25 October 1979

NOTICES

(a) *Date of commencement of voting.* In normal circumstances the Commission may start to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the plenary powers.* The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin* (those marked with an asterisk involve the application of Articles 23a-b and 79b):

*(1) *Sciaena nibe* (Jordan & Thompson, 1911 (Pisces): proposed conservation of the specific name *nibe* by use of the plenary powers. Z.N.(S.) 2226 (E. Trewavas).

(2) *Panopeus* H. Milne Edwards, 1834 (Crustacea, Decapoda): proposed designation of a type species. Z.N.(S.) 2236 (L.B. Holthuis).

(3) *Anaspis* Müller, 1764; *Luperus* Müller, 1764; *Lampyris* Müller, 1764; and *Clerus* Müller, 1764 (Insecta, Coleoptera): proposed designation of a type species. Z.N.(S.) 2240 (H. Silfverberg).

(4) *Ptilium* Gyllenhal, 1827 and *Ptenidium* Erichson, 1845 (Insecta, Coleoptera): proposed conservation. Z.N.(S.) 2244 (H. Silfverberg).

(5) *Chrysomela flavicornis* Suffrian, 1851 and *C. tibialis* Suffrian, 1851 (Insecta, Coleoptera): proposed conservation. Z.N.(S.) 2246 (H. Silfverberg).

(6) *Edwardsia* Costa, 1834 (Arthropoda: Crustacea): proposed suppression under the plenary powers with conservation of *Edwardsia* de Quatrefages, 1841 and EDWARDSIIDAE, Andres, 1881 (Coelenterata: Actiniaria). Z.N.(S.) 2261 (R.B. Williams).

(7) *Muscicapa ruficauda* Swainson, 1838 (Aves, MUSCICAPIDAE): proposed designation of neotype. Z.N.(S.) 2270 (C.W. Benson).

(8) *Polynoe* Savigny, 1818 (Annelida: Polychaeta):

proposed designation of type species. Z.N.(S.) 2288 (A.I. Muir).

(9) *Rhodesiella plumigera* (Loew, 1860) (Insecta, Diptera): proposed suppression. Z.N.(S.) 2146 (C.W. Sabrosky).

(c) *Receipt of new applications.* The following new applications have been received since the publication of vol. 36(2) on 1st August 1979. Those marked with an asterisk involve the application of Articles 23a-b and 79b.

*(1) *Cordylodus dubius* Rhodes, 1953 (Conodonta): proposed conservation. Z.N.(S.) 2308 (L. Jeppsson).

*(2) *'Bos Bubalus Guavera'* Kerr, 1972 (Artiodactyla: Mammalia): proposed suppression. Z.N.(S.) 2309 (C.P. Groves).

*(3) *'Bos Bubalus Anoa'* Kerr, 1792 (Artiodactyla: Mammalia): proposed suppression. Z.N.(S.) 2310 (C.P. Groves).

(4) *Glyptoxysta* Thomson, 1877 (Insecta, Hymenoptera): proposed designation of type species. Z.N.(S.) 2311 (E. Kierych).

(5) *Dapsilarthra* Foerster, 1862 (Insecta, Hymenoptera): proposed conservation. Z.N.(S.) 2312 (C. van Achterberg).

(6) *Archaea* C.L. Koch, 1854 (Aranaea): proposed designation of type species. Z.N.(S.) 2313 (H.W. Levi & R. Legendre).

*(7) *Byrrhus murinus* Fabricius, 1794 and *Porcinolus* Mulsant & Rey, 1869 (Insecta, Coleoptera): proposed conservation. Z.N.(S.) 2314 (M. Mroczkowski).

*(8) *Emys ventricosa* Gray, 1855 (Reptilia, Testudines): proposed suppression, Z.N.(S.) 2315 (J.M. Legler, H.M. & R.B. Smith).

(9) *Eudaemonia* Hübner, 1819 (Insecta, Lepidoptera): proposed type species designation. Z.N.(S.) 2316 (C. Lemaire, D.S. Fletcher & I.W.B. Nye).

(10) *Simplocaria semistriata* Fabricius, 1794 (Insecta, Coleoptera): proposed conservation. Z.N.(S.) 2317 (M. Mroczkowski).

c/o British Museum (Natural History),
Cromwell Road,
LONDON, SW7 5BD
United Kingdom.
September, 1979.

R.V. MELVILLE,
Secretary,
International Commission on
Zoological Nomenclature.

OBITUARIES

N.D. RILEY, C.B.E.

Norman Denbigh Riley was associated with the British Museum (Natural History) from 1911 until his death in June 1979 at the age of 88. He joined the staff as an assistant and became Keeper in charge of the Department of Entomology from 1932 until he retired in 1955. His knowledge of insects in general, and of butterflies in particular, was exceptionally wide and he had a particular gift of communication, both verbally and in popular and technical works. His achievements as an entomologist will be more fittingly recorded elsewhere. This note records his work in the field of zoological nomenclature and pays tribute to some of his personal qualities.

Riley was elected a member of the International Commission on Zoological Nomenclature in June 1950 and following the resignation of Francis Hemming was appointed Secretary by the Executive Committee on 23 July 1958. He was elected a member of the International Trust for Zoological Nomenclature in the same year. During the time he was Secretary to the Commission his extensive editorial and administrative experience was used to the full, for he was a member of the Editorial Committee of the new Code prepared by the London (1958) International Congress of Zoology and was responsible for seeing it through the press. He resigned as Secretary in 1962 – though he remained a member of the Commission until he retired from it in 1965 on reaching the age of 75.

In the 1914-18 war Riley served first in the Army Service Corps and later in the Queen's Regiment (Royal West Surreys) – the old 2nd Foot, nicknamed 'Kirke's Lambs' from their ferocity at the siege of Tangier in Charles II's reign. Ferocity, however, is the last quality one can associate with him. His character is better represented by the regimental motto: *Pristinae Virtutis Memore,* for he was a man of high virtue and integrity. Like many survivors of that terrible war he had a steadfastness, a refusal to be flurried and a capacity to outface disaster that were invaluable to the Commission in the difficult years that followed Hemming's retirement as Secretary. To an Assistant Secretary (R.V.M.) who scarcely knew what was expected of him, Riley's friendship and support were never wanting.

Riley had a marked distaste for the limelight and was a much more effective administrator than he allowed himself to appear. Men and women of wealth and eminence valued his counsel and

young men who worked under him grew in confidence and maturity through his guidance. Few have as much right as he to claim that they had done their share of the world's work.

R.V.M.
I.W.B.N.

C.L. HUBBS

Carl Leavitt Hubbs died in June 1979, aged 84. He was among the world's most eminent ichthyologists and, as a pupil of David Starr Jordan, was directly linked with the great traditions of the 19th century.

Hubbs was a member of the Commission only from 1963 to 1967, when pressure of work at the Scripps Institution of Oceanography at La Jolla led him to resign. Nevertheless, in that short time he made his mark by his trenchant and perspicacious comments on voting papers. He had rendered signal service to the Commission five years before he was elected to it, when he acted as one of several successive chairmen of the Colloquium on Nomenclature that preceeded the International Congress of Zoology at London in 1958.

R.V.M.

FURTHER COMMENTS ON THE PROPOSED DESIGNATION OF A TYPE SPECIES FOR *PLEUROCERA* RAFINESQUE, 1818. Z.N.(S.) 83

(see Vol. 33: 105–113; vol. 34: 196–199)

(1) By J.P.E. Morrison *(1330, 4th Street, S.W., Washington, D.C. 20024, U.S.A.)*

I believe I have studied more of the shells and the animals of the Family PLEUROCERIDAE than anyone else now alive.

I was fortunate to discover the eggs of this family for the first time in North America in 1924 in Kentucky. I saw them again in 1931 in Madison, Wisconsin.

In 1937 I was sent to North Alabama to study under the T.V.A. the only massive deposits of subfossil shells of this family then existent, dating back 10,000 years.

In 1944 Dr. Hemming asked for, and if I remember rightly, got a three to one majority of concerned American malacologists *against* a proposal to change the type species of *Pleurocera.*

In 1954 I published all that was known at that time of the anatomy of the genera of the PLEUROCERIDAE in the world. This was based on all the priority and taxonomy I had by then learned. The genera of this family can be distinguished only by the egg-laying characters. Since 1954 three additional genera have been proven to have distinct egg-laying features, as I said all of them did.

To state the case plainly: *Pleurocera* of Rafinesque 1818 became monotypic in 1820 upon the publication of *Pleurocera verrucosa* Raf. Hannibal in 1912 formally designated this species as the type species; Pilsbry correctly followed this lead in 1917.

All the 'confusion' is based on Bryant Walker's deliberate refusal in 1918 to accept Hannibal 1912 and Pilsbry 1917 in taxonomic clarification of many of Rafinesque's names on a strict priority basis.

I do not see how the International Commission can name as a type species *Pleurocera acuta* Raf. 1831 when that name is preoccupied by *Pleurocerus (Oxytreme) acutus* Raf. in Blainville 1824 and 1825.

Or is it wise to again disregard the priority in this case, and so have to take out *Pachychilus* from South and Central America, and all names based on it, because it is preceded as a genus?

I believe the International Commission should reject this attempted reversal of the 1944 vote, and let strict priority rule.

Strict adherence to priority of scientific names is the only correct International rule. It does not require rulings every 10, 20 or 30 years, nor does it require the outlawing of any previous writings.

Incorrect names are, and always will be subject to correction, no matter who uses them, nor how often they are published.

(2) By J. Rosewater *(National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560, U.S.A.)*

It would be very shortsighted of me to disagree with the basic premise that by far the best procedure to follow in such matters is simple priority. Where there is clear and unencumbered priority I am the first to do so! Unfortunately some of our early workers did not always express themselves in a clear and unencumbered manner.

To me and to a number of my colleagues who have already responded to you the strict application of priority in this case *would* cause confusion. In many instances psychic powers are required to interpret what Rafinesque had in mind in his writings. The *Pleurocera* case is one of these. He introduced names, however – some of which have become very well entrenched in our classification. Tryon used a number of these names in his monograph of the STREPOMATIDAE. Most persons of that time and for many years afterwards (even to the present day) seized upon Tryon's usages, as an understandable interpretation of Rafinesque's meanderings. I therefore feel very strongly that Tryon should continue to be regarded, in the parlance of the Rules, as 'first reviser'.

If there had been Rules to go by back in 1818, perhaps Rafinesque would have followed them, although I am hardly convinced of this. The generations of workers who followed him have been the unlucky heirs of his jumbled nomenclatural bequest. I believe that the Law of Priority, as rewritten following the Monaco meeting (1972) has direct application in cases such as these. This problem was submitted to the Commission and a solution was recommended by you in 1976 *(Bull. zool. Nomencl.* vol. 33, pt. 2).

I believe that use of the plenary powers is absolutely necessary to resolve the problem. The confused history of the name until Tryon established the pattern of usage which has persisted almost uninterrupted to the present day makes simple priority inoperative in this case.

(3) By A.H. Clarke *(National Museum of Natural History, Washington D.C. 20560, U.S.A.)*

In my opinion strict application of the Law of Priority does not always produce stability but often results in chaos. That is the reason why the Congress gave the Commission plenary powers to modify its force. There are hundreds of publications in the literature dealing with *Pleurocera*, in the sense of *acuta* as type, and this literature will mislead future workers if the name *Pleurocera* is transferred from one species group to another. Publications about *Pleurocera* based on the concept of *verrucosa* as type are very few. Future confusion should be prevented, especially when the basis for the transfer is not entirely rigorous.

It is pertinent to mention here that *Pleurocera acuta* is one of our best-known species, due substantially to the fine monograph by B. Dazo (1965, *Malacologia* vol. 3: 1–80). It is also abundant. *Lithasia verrucosa* is not well known and its continued survival is even in jeopardy because of potential

habitat disruption. Future generic assignments involving *Pleurocera* would certainly be facilitated if *P. acuta* remained its type.

We are witnessing here a tiresome continuation of the sterile, ancient debate involving the interpretation of Rafinesque's names. I appeal to the Commission to settle this case, which is one of the most important issues involving Rafinesque's names, and to decide it on the basis of fostering stability and reducing confusion.

(4) By Carol B. Stein *(Museum of Zoology, Ohio State University, 1813 North High Street, Columbus, Ohio 43210)*
[Dr Stein is replying to a letter from the Secretary.]

1. *The status of* Pleurocerus *Rafinesque in Blainville, 1824.*

In your letter you state: 'On the strict letter of the law, and taking the evidence purely at its face value, *Pleurocerus* Blainville, 1824 (*Dict. Sci. nat,* vol. 32: 236) is a new name for a new genus, since there is no direct link with *Pleurocera* Rafinesque, 1818 or 1819'. It appears to me that a vital part of the evidence that must be taken at face value is Blainville's last sentence in his discussion of *Pleurocerus,* at the bottom of: 236:

> *'Observ.* Nous n'avons vu ni l'animal, ni la coquille de ce genre, proposé par M. Rafinesque; peut-être n'est-ce que la paludine coupée de M. Say?'

I understand this sentence to mean, in English:

> *'Observation.* We have seen neither the animal, nor the shell of this genus, proposed by M. Rafinesque; is it, perhaps, nothing but the short paludine [i.e. *Paludina decisa* Say, 1819, see Blainville, 1824: 231] of Mr Say?'

Surely this observation constitutes a direct link with *Pleurocera* Rafinesque? When Blainville says clearly that he himself had not seen either the animal or the shell of the genus proposed by Rafinesque, how could such a statement possibly be interpreted as an intent by Blainville to describe thereby a new genus under a new name?

Pleurocerus Blainville, 1824, is evidently a misspelling of *Pleurocera* Rafinesque, 1818. It is evident from Blainville's work that he was not careful to preserve the original spellings of scientific names, as shown in his use of *'Olygira'* for the genus *Olygyra* Say, 1818 (*J. Acad. nat. Sci. Philadelphia* vol. 1: 283) and his 'Oxytrème Rafinesque' for *Oxytrema* Rafinesque, 1819 (*J. Phys. Chim. Hist. nat.,* vol. 88: 423). *Pleurocera* should be retained as the correct original spelling.

Since Blainville was not careful with his spelling of *Olygyra* and *Oxytrema,* it would appear that his use of a masculine ending *Pleurocerus* for *Pleurocera* is an incorrect subsequent spelling without status in nomenclature. It remains unquestionably true that *Pleurocera verrucosa* Rafinesque, 1820, is, under the strict interpretation of the Code, the type species of *Pleurocera,* by subsequent monotypy.

2. *The status of the specific names* acutus *and* oblongus *in Blainville, 1824.*

If Binney and Tryon's 1864 reprint of Rafinesque's work is correct, Rafinesque's original description of *Pleurocera acuta* was published in Philadelphia in November 1831. In that paper (: 67 of the reprint), Rafinesque cites the species as *'Pleurocera Acuta,* Raf. 1818'. I have found no evidence that *acuta* was published in 1818. Perhaps that was the date when Rafinesque wrote a description of the species in his diary or journal; or perhaps in 1818 he wrote the manuscript that was later seen in that form by Blainville but never published. It is obvious that Blainville had never seen the animal or the shell of any of Rafinesque's species of the genus; hence we must attribute the descriptions published by Blainville of *Pleurocerus, oblongus* and *acutus* to Rafinesque.

This being the case, *Pleurocera acuta* Rafinesque, 1831 is a justified emendation of *Pleurocerus acutus* Rafinesque *in* Blainville, 1824, and accompanies a redescription of the species which makes it readily identifiable. The species is not identifiable from the 1824 description on its own. It could refer equally well to all the species described by Lea (1862, *Proc. Acad. nat. Sci. Philadelphia* for 1862: 169) under *Trypanostoma,* and to *Io fluvialis* (Say, 1825) and its congeners. But there is no question of the identity of *P. acuta* Rafinesque, 1831.

If we do not take the course suggested above, then it would appear that *P. acutus* of 1824, regardless of authorship, would preoccupy *P. acuta* Rafinesque, 1831, which is adequately described and has been generally accepted for many years. The specific name should therefore be attributed to Rafinesque *in* Blainville, 1824.

The name *Pleurocerus oblongus* Rafinesque *in* Blainville, 1824, is also an available name, using the same reasoning. However, I have not found any evidence of a subsequent description of this species by Rafinesque or any other author, and it is not listed in Tryon's index (1873). I do not think a case can be made for its identifiability on the basis of the 1824 description. Thus it remains a *nomen dubium.*

3. *The status of the generic name* Oxytrema.

It seems obvious that Blainville meant, by his '(G. Oxytrème. Rafin.)', to refer to *Oxytrema* Rafinesque, 1819, just as, a few lines above, he used the same construction, '(G. Olygira. Say)', to refer to what is obviously *Olygyra* Say, 1818. It would seem that this usage should be considered, like *Pleurocerus,* an incorrect subsequent spelling of *Oxytrema* Rafinesque, 1819. However, since Blainville evidently used it in the sense of a subgenus, separating it from the group of *Pleurocerus* s.s. exemplified by *P. oblongus* in couplet A of his key, Morrison (1954: 360) was correct in stating: 'Blainville, in 1824 and again in 1825 (p. 442), placed one species of Rafinesque under this generic name. He gave as the sole example of the subgenus *Pleurocerus (Oxytrema)* [Oxytrème] *acutus* (Rafinesque) [Rafin.], validating the specific name in 1824. Rafinesque (1831, p.3) again described his *Pleurocera acuta,* and at the same time declared that he had given the name in 1818. From 1824 on, *Oxytrema* has been the earliest available name for the group because the genotype was fixed at that

time as *Pleurocera (Oxytrema) acuta* Blainville by monotypy. With no serious question ever raised about the identity of *acuta*, the genotype, doubts about the identity of the genus *Oxytrema* vanish.'

While, as explained in section 2 above, I disagree with Morrison concerning the authorship and identity of *acuta* 1824, I believe he is correct in considering that *acuta* dates from 1824 and that it is the type, by monotypy, of the genus (or subgenus) *Oxytrema* Rafinesque.

If the ICZN should decide to reject the Law of Priority and Article 33a(ii), under which *Pleurocera verrucosa* must be the type species of *Pleurocera* (and *Pleurocerus*), and should rule in favour of perpetuating the erroneous usage of *acuta* as its type species, then it would be placing *acuta* in the position of being the type species of both *Pleurocera* and *Oxytrema*.

4. *On the use of the plenary powers to designate* acuta *as the type species of* Pleurocera.

In my training as a scientist, I have been taught that even the most widely held concepts, hypotheses, theories, and even 'natural laws' are subject to testing. If, when tested, they prove to be in error, they must be modified or rejected. For thousands of years men 'knew' the Earth was flat. The 'scientific literature' on the subject was probably unanimous in agreeing that this was the correct concept. Giordano Bruno was burned at the stake for his insistence that the evidence showed the earth was not flat, but spherical. Yet gradually those who looked objectively at the evidence came to abandon the old opinion, despite the Church's 'plenary powers'. I understand that when the astronauts' first pictures of the Earth from outer space were published, even the last members of the Flat Earth Society gave in to reality.

It would be pleasant to think that the ICZN could look objectively at the abundant evidence that *verrucosa* is, by its own Code, inevitably the type species of *Pleurocera*, as shown by Hannibal (1912: 169), Pilsbry (1917: 110), Rehder (1951) and Morrison (1954), and would not use their plenary powers to suppress this correct usage and to deliberately perpetuate an error, simply because this error has been in use by a majority of authors for several years.

The current state of pleurocerid systematics is in a state of flux. Generic limits are not at all certain at present. New taxonomic techniques, such as electrophoretic analysis of proteins, karyotype studies, and scanning electron microscope studies are just beginning to provide new comparative data on which to base a more realistic view of the phylogenetic relationships of the various taxa of pleurocerid snails. Morrison's 1954 studies have started the ball rolling by using anatomical features of the soft parts and behavioral characteristics in conjunction with shell characters to define genera. But there is much more to be done. If the nomenclature is to be solidly based, we simply must go back to the Law of Priority and establish what is the earliest name for any genus in the group and what is its type species. Then we go on to the next oldest one, and see if its type species is, or is not, congeneric with that of the first genus. And so we build on rock, not on the sand of a plenary powers decision based on the temporal popularity of an erroneous usage a century and a half later.

(5) Observations on Dr Stein's comment by the Secretary, International Commission on Zoological Nomenclature

Dr Stein's remarks in her Section 1 on the status of *Pleurocerus* Blainville, 1824, are illuminating and constructive. It is clear that Blainville was discussing a genus of shells of which he had seen no representative, but which he attributed to Rafinesque. *Pleurocerus* is therefore best treated as an erroneous subsequent spelling of *Pleurocera* Rafinesque, 1818.

Her remarks in her Section 2 on the authorship of the specific names *acutus* and *oblongus* seem more debatable. There is no internal evidence in any of Rafinesque's works prior to 1831 that he ever intended a species *Pleurocera acuta*, and none at all that he intended a species *P. oblonga*. On the internal evidence of Blainville's work taken at its face value, it seems to me that he must be regarded as the author of both names. There is not the same connection to Rafinesque as there is for *Pleurocerus*. The Commission could, however, be invited to rule on this matter.

In her Section 3, on the status of *Oxytrema*, Dr Stein, following Dr Morrison, is not correct. Blainville's 'Oxytrème' is a French vernacular name and does not enter zoological nomenclature at all. Consequently, the type species of *Oxytrema* Rafinesque, 1819 (a genus established without included species) cannot be determined by reference to Blainville's work. Under the provisions of Article 69a(ii) strictly interpreted, the type species of *Oxytrema* would appear to be *Oxytrema crenulatum* Menke, 1830, *Syn. meth. Moll.* (ed. 2): 317. Information on the current usage of this generic name would be helpful.

In her Section 4 Dr Stein resorts to special pleading that can easily be turned against her. The Law of Priority is an excellent example of a law that has been tested and many times found wanting. She is wrong to imply that the Commission cannot look objectively at the application of the Code to the question of the type species of *Pleurocera*. It is less than true to say that what she considers an error has been 'in use by a majority of authors for several years'. It has been in majority use for well over a hundred years.

As may be inferred from the succeeding comment by Dr George M. Davis, the rules for determining the type species of a genus established without included species have changed with time. It is true that the Paris (1948) Congress agreed that the type species of such a genus should be that species, or one of those species, first subsequently referred to that genus (*Bull. zool. Nom.* vol. 4: 159–160, 346); but that decision only took effect on the publication of the revised text of the *Règles (Bull. zool. Nom.* vol. 5: 58–59), and that took place only on the publication of the first edition of the present Code in 1961. Prior to 1961, therefore, the situation was governed by Opinion 46. Under that Opinion, as Walker had shown in 1917 (see *Bull. zool. Nom.* vol. 33: 107), *Pleurocera acuta* was the first species eligible to be the type of the genus. Consistent usage for 50 years before his work, and majority usage thereafter until 1961, in that sense cannot, therefore, be considered irregular in terms of

Opinion 46. Moreover, the fact that, since 1961, *P. verrucosa* has been the type species under Article 69a(ii) clearly has not affected majority usage in favour of *P. acuta.* This is true for workers who are fully up to date with the latest taxonomic techniques.

To sum up, therefore, the effect of Dr Stein's comment is that the Commission should be asked to rule on the author and date of the specific name *acuta (acutus).* Is it to be attributed to Blainville, 1824, or to Rafinesque *in* Blainville, 1824? She does not seem to me to have undermined the solid evidence in favour of the use of the plenary powers to declare *P. acuta* the type species of *Pleurocera,* as is favoured by a large majority of those who have made their views known to the Commission.

Finally, under Article 80 and 80(i) of the Code (*Bull. zool. Nom.* vol. 31: 89), the publication of my report in *Bull. zool. Nom.* vol. 33 (1976) initiated a compulsory period of maintenance of current usage, which is clearly in favour of *P. acuta.*

(6) By George M. Davis *(Acadamy of Natural Sciences, Philadelphia, PA 19103)*

I argue most strongly that *Pleurocera acuta* Rafinesque be designated as the type species of *Pleurocera.* The arguments are clearly ones of the spirit of the law versus the letter of the law. The arguments set forth by Walker, 1917, and by Rosewater, 1976, are persuasive for the following reasons:

(1) The generic definition given by Rafinesque, 1818, is quite clear. It encompasses taxa grouped on the basis of *P. acuta* as type species of *Pleurocera.* It excludes the *Lithasia–Angitrema* concepts to which *P. verrucosa* Rafinesque clearly pertains. As Walker, 1917, pointed out, *P. acuta* was 'the first identifiable species described as *Pleurocera* and complying with the original generic diagnosis'.

(2) It is clear that users of the name *P. acuta* accepted Walker's argument as valid within the framework of the *Règles* as they then stood. It is also clear that the concepts of *Lithasia* including *L. verrucosa* and *Pleurocera* including *P. acuta* were well established by Tryon, 1873, in his monumental monograph on the PLEUROCERIDAE (= STREPOMATIDAE) of North America. For well over 100 years the concepts of *Lithasia* and *Pleurocera* have been stable. A vast literature in ecology, systematics and parasitology has grown based on *P. acuta* as type species of *Pleurocera.*

(3) This is an age of legal involvement concerning rare and endangered species. It is of utmost importance to safeguard the stability of nomenclature. Dictating that *verrucosa* be type species of *Pleurocera* would cause extreme havoc in pleurocerid systematics in North America including extreme problems with the U.S. Federal listing of endangered species, where taxa have been nominated on the basis that *acuta* was the type species of

Pleurocera and that *Lithasia*, including *verrucosa*, was a quite distinct genus. I provided such a report as a service contracted by the U.S. Fish and Wildlife Service on rare and endangered species from south-eastern U.S.A. (Davis, 1974).

More recently, Burch, 1978, has produced an outline classification of the Recent freshwater gastropods of North America in preparing a manual for the U.S. Environmental Protection Agency on North American freshwater gastropods. He considered *acuta* to be the type species of *Pleurocera*.

Clearly it would not be in the service of North American malacological, ecological and parasitological sciences to cause a small switch in names that would create enormous chaos at so many levels of involvement: science, government and the law.

REFERENCES

BURCH, J.B. 1978. An outline of classification of the Recent freshwater gastropods of North America (north of Mexico). *J. Conchyliol.* vol. 115: 3–9.

DAVIS, G.M. 1974. *Report on the rare and endangered status of a selected number of freshwater gastropods from southeastern U.S.A. to Fish and Wildlife Service.* 51 pp., 25 maps.

ROSEWATER, J. 1976 *in* MELVILLE, R.V. *Pleurocera* Rafinesque, 1818 (Gastropoda): proposed designation of type species under the plenary powers. *Bull. zool. Nom.* vol. 33: 105–113.

TRYON, G.W. 1873. *Land and Fresh Water Shells of North America.* IV. Strepomatidae. Smithsonian Institution, 435 pp.

WALKER, B. 1917. The type of *Pleurocera* Rafinesque. *Occ. Pap. Mus. Zool. Univ. Michigan*, vol. 38: 1–10.

COMMENT ON THE PROPOSALS REGARDING THE GENERIC NAME *PECTINARIA* LAMARCK, 1818. Z.N.(S.) 2202

(see vol. 34: 112; vol. 35: 18, 25)

By Karl Banse *(Department of Oceanography, University of Washington, Seattle, Washington 98195, U.S.A.)*

I am a polychaete taxonomist just completing the second and final volume of keys for the about 460 species known from the Oregon Biogeographic Province and have, therefore, something at stake regarding the nomenclature of species. Yet my main concern regarding *Pectinaria* is directed at the family and genus level. Here, the arguments in this case centre evidently on the question of priority versus usage. The gist of my comment is to ask that the

Law of Priority be applied as long as it is practical but not if stability of names or usage is threatened. In fact, my principal motive in writing this letter is not that of a taxonomist but that of a biologist who uses names as shorthand descriptions of his objects of study.

Family level: In my opinion no serious difficulties will arise among ecologists and other users of names if the Law of Priority is applied and AMPHICTENIDAE is used as proposed by Dr Holthuis (see also Pettibone, *Bull. zool. Nom.* vol. 35: 24). I will use it in the key mentioned above.

Genus level: I urge that the generic name *Pectinaria* be preserved and *Cistena* suppressed. Bibliographies, abstracting journals, etc. utilise generic names as the principal entries for unlocking the existing literature, which for *Pectinaria spp.* is quite extensive in regard to ecology, physiology, and also applications (i.e. fisheries biology contrary to Dr Holthuis's remark, *Bull. zool. Nom.* vol. 35: 19). By suppressing *Pectinaria* but not taking into account the prevailing custom of not citing synonymies in non-taxomic work, the old literature on *Pectinaria spp.* will, as a means to finding information, become closed to the users of zoological names after *Cistena* had taken hold. On the other hand, the name *Pectinaria,* even if suppressed, would continue to prevail in the non-taxonomic literature for several decades. Species are identified by field workers and physiologists from taxonomic, monographic keys. All the existing keys and handbooks for polychaetes use *Pectinaria.* The labour of preparing a key for an entire polychaete fauna and the poor support of taxonomy ensure that our major keys (about ten for the sedentary polychaetes, worldwide) will not be revised for some time. Thus *Cistena* would for a long time live only for the taxonomists. I therefore do not agree with Dr Holthuis that the 'acceptance of *Cistena* would [not] cause much inconvenience'. Quite to the contrary, it will in my opinion certainly create confusion.

Species level: All of us realise that the choices open to you present very difficult problems. I urge you to decide in such a way that changes of subgeneric names (*Lagis* versus *Pectinaria,* see *Bull. zool. Nom.* vol. 35: 24, 26) will not be a consequence of your decision. I ask this for the reason given above, that the names are a means to an end which is of concern to all biologists and not only to taxonomists.

CONUS FERGUSONI G.B. SOWERBY III, 1873 (GASTROPODA): COMMENT ON PROPOSED VALIDATION. Z.N.(S.) 2239

(see vol. 35: 189–191)

By W.O. Cernohorsky *(Auckland Institute and Museum, Auckland, New Zealand)*

I fully support the conservation of *Conus fergusoni.* This specific name is now firmly entrenched in malacological literature, which, however, is not evident from Mr Tucker's citation of nine uses during the preceding 50 years.

The combination *Conus fergusoni* Sowerby has also been used by the authors listed below.

On page 190 of the application, line 13 from the foot, the name *'Conus flavocinctus'* should be corrected to *'Conus fulvocinctus'*.

REFERENCES

EMERSON, W.K. & PUFFER, E.L. 1957. Recent mollusks of the 1940 'E.W. Scripps' cruise to the Gulf of California. *Amer. Mus. Novit.* no. 1825, 57 pp.

GRANT, U.S. & GALE, H.R. 1931. Catalogue of the marine Pliocene and Pleistocene Molusca of California. *Mem. San Diego Soc. nat. Hist.* vol. 1: 1–1036.

NYBAKKEN, J. 1971. *The Conidae of the Pillsbury* [sic] *expedition to the Gulf of Panama. Studies in tropical American molluska.* Univ. Miami Press, Coral Gables: 93–110.

OLIVER, A.P.H. 1975. *The Hamlyn guide to shells of the world.* Hamlyn Publ. Group Ltd., London, 320 pp.

OLSSON, A.A. 1964. *Neogene mollusks from northwestern Ecuador.* Paleont. Res. Inst., Ithaca, 256 pp.

OPINION 1145
DRYOCOETES EICHHOFF, 1864 (COLEOPTERA: SCOLYTIDAE) CONSERVED UNDER THE PLENARY POWERS

RULING – (1) Under the plenary powers, the generic name *Anodius* Motschulsky, 1860, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Dryocoetes* Eichhoff, 1864 (gender: masculine), type species, by subsequent designation by Hopkins, 1914, *Bostrichus autographus* Ratzeburg, 1837, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2096.

(3) The specific name *autographus* Ratzeburg, 1837, as published in the binomen *Bostrichus autographus,* is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2698.

(4) The generic name *Anodius* Motschulsky, 1860, as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 2112.

HISTORY OF THE CASE Z.N. (S.) 2070

An application for the use of the plenary powers to conserve *Dryocoetes* Eichhoff, 1864 was first received from Dr Stephen L. Wood *(Brigham Young University, Provo, Utah, USA)* on 29 April 1974. It was sent to the printer on 27 August 1974 and published on 31 December 1974 in *Bull. zool. Nom.* vol. 31: 232–233. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to seven entomological serials. The application was supported by Dr D.E. Bright *(Biosystematics Research Institute, Ottawa, Canada).* No adverse comment was received.

DECISION OF THE COMMISSION

On 27 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)29 for or against the proposals set forth in *Bull. zool. Nom.* vol. 31: 232–233. At the close of the voting period on 27 December 1978 the state of the voting was as follows:

Affirmative Votes – twenty-two (22) received in the following order: Melville, Holthuis, Brinck, Eisenmann, Alvarado,

Mroczkowski, Vokes, Willink, Habe, Tortonese, Binder, Corliss, Welch, Heppell, Ride, Bayer, Cogger, Kraus, Nye, Sabrosky, Dupuis, Bernardi

Negative Votes – none (0).

No voting paper was returned by Starobogatov.

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and an Official Index by the Ruling given in the present Opinion:

Anodius Motschulsky, 1860, in Schrenk, *Reisen und Forschungen im Amur-Lande,* vol. 2, zweite Lieferung, Coleopteren: 156–157

autographus, Bostrichus, Ratzeburg, J.T.C., 1837, Die Forst-Insecten . . . Erster Theil, Die Käfer: 194–195

Dryocoetes Eichhoff, 1864, *Berliner ent. Zeitschr.*, vol. 8: 38–39.

The following is the original reference to a type-species fixation accepted in the ruling given in the present Opinion: of *Bostrichus autographus* Ratzeburg, 1837, for *Dryocoetes* Eichhoff, 1864, by Hopkins, A.D., 1914, *Proc. U.S. nat. Mus.*, vol. 48: 121.

CERTIFICATE

I hereby certify that the votes cast on V.P. (78)29 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1145.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
10 April 1979

OPINION 1146
XYLEBORUS EICHHOFF, 1864 (COLEOPTERA: SCOLYTIDAE) CONSERVED UNDER THE PLENARY POWERS

RULING – (1) Under the plenary powers, the generic name *Phloeotrogus* Motschulsky, 1863, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Phloeotrogus* Motschulsky, 1863, as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 2113.

HISTORY OF THE CASE Z.N.(S.) 2069

An application for the use of the plenary powers to conserve the generic name *Xyleborus* Eichhoff, 1864, was first received from Dr Stephen L. Wood *(Brigham Young University, Provo, Utah, USA)* on 29 April 1974. It was sent to the printer on 27 August 1974 and published on 31 December 1974 in *Bull. zool Nom.* vol. 31: 230–231. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the statutory serials and to seven entomological serials. The application was supported by Dr D.E. Bright *(Biosystematics Research Institute, Ottawa, Canada).* No adverse comment was received.

DECISION OF THE COMMISSION

On 27 September 1978 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1978)28 for or against the proposals set out in *Bull. zool. Nom.* vol. 31: 230. At the close of the voting period on 27 December 1978 the state of the voting was as follows:

Affirmative Votes – nineteen (19) received in the following order: Melville, Holthuis, Brinck, Eisenmann, Alvarado, Vokes, Willink, Habe, Tortonese, Binder, Corliss, Welch, Heppell, Ride, Bayer, Cogger, Kraus, Bernardi, Sabrosky

Negative Vote – Mroczkowski.

Dupuis and Nye abstained. No vote was returned by Starobogatov.

The following comments were returned by members of the Commission with their voting papers:

Holthuis: "I would have preferred, instead of suppressing *Phloeotrogus,* to have it placed on the Official List with the annotation that authors who think the type species of *Phloeotrogus* and *Xyleborus* congeneric have to give precedence to the later name."

Mroczkowski: "As the generic names *Phloeotrogus* and *Xyleborus* are only subjective synonyms, the Commission should, in my view, apply the 'relative precedence' procedure."

Heppell: "If names on the Official Lists were accorded automatic precedence over senior names not on the Lists, this case need not have been referred to the Commission."

Kraus: "As the generic name *Xyleborus* has already been placed on the Official List and thus must be used in any case, I doubt if it is really necesary to suppress the senior subjective synonym *Phloeotrogus."*

Nye: "I abstain from voting as there are two problems in this case, only one of which has been discussed. We are being asked to permanently suppress *Phloeotrogus* Motschulsky, 1863, as it is senior to *Xyleborus* Eichhoff, 1864, a name already on the Official List. I would agree that *Xyleborus* should be given precedence over *Phloeotrogus,* but by Dr Wood's proposal to permanently suppress the latter, it cannot then be used for a subgenus. Dr Wood mentions that the type species of *Phloeotrogus* belongs to the same subgeneric group as *Ambrosiodmus* Hopkins, 1915. Whether or not *Phloeotrogus* or *Ambrosiodmus* should be used at the subgeneric level is an issue which has been glossed over in the application. I would prefer to give *Xyleborus* precedence over *Phloeotrogus* when applied to the same taxon. *Phloeotrogus* would then still be available for use, if required, at the subgeneric level."

Dupuis: "C'est sur *Phloetrogus* (et non pas sur *Xyleborus*) qu'il faut voter. Je vote la suppression de *Phloeotrogus* uniquement pour les zoologistes qui considèrent ce nom comme synonyme subjectif de *Xyleborus* s. str."

Bernardi: "Oui, parce qu'il s'agit d'un genre à intérêt économique."

NOTE ON THE COURSE ADOPTED IN THE PRESENT OPINION

The question of whether the present case should be reopened so that the "relative precedence" procedure should be offered as an alternative was carefully considered. I decided not to do so for the following reasons. First, *Xyleborus* is already on the Official List of Generic Names (No. 1789) and the name of its type species, *Bostrichus monographus* Fabricius, 1792 is on the Official List of Specific Names (No. 2236) as a result of the ruling in Opinion 848 (so that Dr Wood's request regarding the latter was not necessary).

Secondly, the conservation of a senior generic synonym for use at subgeneric level, as advocated by Dr Nye and implied in the comments of Professor Holthuis, Dr Mroczkowski and Professor Dupuis, seems to me a likely cause of confusion in the future, particularly where a genus containing a number of species of economic importance is concerned. Thirdly, as Dr Wood showed, *Xyleborus* is amply provided with subjective junior synonyms that are available for use as subgeneric names, and one of them *(Ambrosiodmus)* can be used in place of *Phloeotrogus.*

When the comments of members of the Commission were communicated to Dr Wood, he remarked that *Xyleborus* should be preserved at almost any cost, but that *Phloeotrogus* need not be, although its preservation for use as a subgeneric name would be acceptable to him.

Against the view that *Phloeotrogus* should be preserved is the view of Mr Heppell and Professor Kraus that names on Official Lists should be treated as protected against all senior synonyms not already considered by the Commission. In view of this conflict of views, it has seemed best to publish the result of the Commission's vote without further delay.

ORIGINAL REFERENCE

The following is the original reference for a name placed on an Official Index by the ruling given in the present Opinion:

Phloeotrogus Motschulsky, 1863, *Bull. Soc. imp. Nat. Moscou,* vol. 36: 512.

CERTIFICATE

I certify that the votes cast on Voting Paper (78)28 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1146.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
10 April 1979

MEROPIDAE (AVES): PROPOSED AMENDMENT OF ENTRY IN OFFICIAL LIST OF FAMILY-GROUP NAMES IN ZOOLOGY. Z.N.(S.) 2286

By P.S. Tomkovich *(Zoological Museum, Moscow State University)* and G.N. Kashin *(Moscow)*

The Commission placed the family name MEROPIDAE (type genus *Merops* Linnaeus, 1758) on the Official List of Family-Group Names in Zoology in Direction 6 (1954) as Name Number 1. The name was attributed to "Lesson, 1830" with the original reference "*Traité Orn.:* 236".

2. However, Lesson was not the first author to base a family-group name on *Merops* Linnaeus, 1758 (Aves). This was first done by Rafinesque, C.S., 1815, *Analyse de la Nature:* 66 (Palermo), as "Meropia", according to Richmond, C.W., 1909, *Auk,* vol. 26: 37–55. Other users of such names were:

Anon, 1820, *Synopsis of the contents of the British Museum,* 17th ed.: 68

Horsfield, T., 1821, *Trans. linn. Soc. London,* vol. 13 (1): 168

Vigors, N., 1825a, *Zool. J.,* vol. 2 (7): 393; 1825b, *Trans. linn. Soc. London,* vol. 14 (3): 428

Boie, F., 1826, *Isis* (Oken), vol. 19: 971

Lesson, R.P., 1828, *Manuel d'Ornithologie,* vol. 1: 65, vol. 2: 85 (as "Méropidées").

3. In view of these facts, the International Commission on Zoological Nomenclature is requested to amend the entry under Name No. 1 in the Official List of Family-Group Names in Zoology to read: 'MEROPIDAE Rafinesque, 1815, *Anal. Nat.:* 66 (as "Meropia")'. At the same time, the name "Meropia" Rafinesque, 1815, should be placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology as an incorrect original spelling of MEROPIDAE.

SCIAENA NIBE JORDAN & THOMPSON, 1911 (PISCES): PROPOSED CONSERVATION OF THE SPECIFIC NAME *NIBE* BY USE OF THE PLENARY POWERS. Z.N.(S.) 2226

By E. Trewavas *(British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K.)*

In a revision of the Indo-West Pacific SCIAENIDAE (Trewavas, 1977, *Trans. zool. Soc. Lond.*, vol. 33: 253–541) the name *Atrobucca nibe* (Jordan & Thompson, 1911) has been used for a well-known and economically important fish of Chinese and Japanese seas, in spite of it being a junior synonym of *Pseudotolithus brunneolus* Jordan & Richardson, 1909. This follows usage extending over sixty-six years, and I am now asking the Commission to suppress the senior name.

2. *P. brunneolus* was established by Jordan & Richardson, 1909 (A catalog of the fishes of the island of Formosa. *Mem. Carnegie Mus.*, vol. 4: 191, pl. 71), from specimens landed in Formosa (Taiwan). It is stated by K.Y. Chu, 1956 (: 23), under its later name, to be the most abundant sciaenid species in coastal waters of Taiwan.

3. *Sciaena nibe* was established by Jordan & Thompson, 1911 (A review of the sciaenoid fishes of Japan. *Proc. U.S. natn. Mus.*, vol. 39: 258, fig. 4), from specimens landed at Wakanoura, Japan.

4. The name *brunneolus* has been mentioned (to my knowledge) only twice since the original description, first when J.F.T. Chen (1952: 373) in his 'Check-list of the species of fishes known from Taiwan (Formosa)' listed it with a query in the synonymy of *Argyrosomus nibe;* and second when K.Y. Chu (1956: 23) placed it at the end of the synonymy of *A. nibe.*

5. Published uses of the name *nibe* in various generic combinations, but for the same species, are:

JORDAN, D.S. & HUBBS, C.L. 1925. Record of fishes obtained by David Starr Jordan in Japan, 1922. *Mem. Carnegie Mus.*, vol. 10: 243.

LIN, S.Y. 1935. Notes on some important fishes in China. *Bull. Chekiang prov. Fish. Exper. Sta.*, vol. 1: 19, fig. 10.

MATSUBARA, K. 1937. Sciaenoid fishes found in Japan and its adjacent waters. *J. Imp. Fish. Inst.*, vol. 32: 52, figs. 19–22, table 6. (A full taxonomic treatment with variation based on large samples).

TANG, D.S. 1937. Sciaenoid fishes of China. *Amoy mar. biol. Bull.* vol. 2: 67.

LIN, S.Y. 1938. Further notes on sciaenid fishes of China. *Lingnan Sci. J.*, vol. 17: 367.

MATSUI, J. & TAKAI, T. 1951. Ecological studies on the black croaker, *Nibea nibe* (Jordan & Thompson). *Contr. Shimonoseki Coll. Fish.* 1951: 125–143, figs. 1–10.

CHEN, J.T.F. 1952. Check-list of the species of fishes known from Taiwan (Formosa) (continued). *Q. J. Taiwan Mus.*, vol. 5: 330.

CHU, K.Y. 1956. A review of the sciaenoid fishes of Taiwan. *Rep. Inst. Fish. Biol. Taipei*, vol. 1(1): 23, pl. 2, fig. 1.

CHU, Y.T., LO, Y.L. & WU, H.L. 1963. *A study on the classification of the sciaenoid fishes of China, with description of new genera and species.* pp. i-ii, 1–100, pls. 1–40. Shanghai Fisheries College. [Reprinted 1972 Antiquariaat Junk, Lochem, Netherlands.] *A. nibe* is described on pp. 64 and (English) 94, figs. 37, 63, 89, and is made type of a new genus, *Atrobucca.*

KAMOHARA, T. 1964. Revised catalogue of fishes of Kochi Prefecture, Japan. *Rep. Usa mar. biol. Sta.*, vol. 11: 50.

TANIGUCHI, N. 1969-70. Comparative osteology of the sciaenid fishes from Japan and its adjacent waters. I. Neurocranium. *Jap. J. Ichth.*, vol. 16 (1969): 55–67, 8 text-figs. II. Vertebrae. *ibidem:* 153–156, 1 text-fig. III. Premaxillary and dentary. *ibidem*, vol. 17 (1970): 135–140, 3 text-figs.

MOHAN, R.S. Lal, 1972. A synopsis to the Indian genera of the fishes of the family Sciaenidae. *Indian J. Fish.*, vol. 16: 82–98.

TALWAR, P.K. & SATHIARAJAN, R. 1975. A new bathyal fish, *Atrobucca trewavasae* (Pisces, Sciaenidae) from the Bay of Bengal. *J. nat. Hist.*, vol. 9: 575–580.

6. After the original descriptions, the species has only once been described or referred to from Chinese or Japanese waters by any other name than *nibe*, namely by Wang, 1935 (*Contr. Lab. Sci. Soc. China*, vol. 10: 393–481), in his study of teleost fishes. In this work Wang established *Nibea pingi* for it under the impression that he had an undescribed species. Specimens caught in Indian waters have been misidentified by Dutt & Thankam, 1968, as *Otolithes ruber* (Schneider, 1801); and by Talwar & Joglekar, 1972, as *Argyrosomus argentatus* (Houttuyn).

7. I have considered whether it would be better to ask for *Sciaena nibe* to be given nomenclatural precedence over *Pseudotolithus brunneolus* or to ask that the latter name be suppressed, and have concluded that the latter course would be preferable. My

reasons for this are:–

(a) In the course of a comprehensive revision of the Indo-Pacific SCIAENIDAE I have examined the holotype and one paratype of *Pseudotolithus brunneolus* (now housed in the Field Museum, Chicago) and have compared them with a topotype of *Sciaena nibe* and with the very thorough original description of that nominal species and consider that there can be no reasonable doubt of their specific identity.

(b) The only two authors to have mentioned the name *brunneolus* since its proposal have considered it a synonym of *nibe*, but have preferred to use the latter.

(c) Many zoologists, especially those working in applied fields and on fishery statistics, would not readily appreciate the subtleties of the 'relative precedence' procedure.

8. To sum up:

(a) The specific name *brunneolus* has not been used as a valid name since it was established in 1909.

(b) The younger name for the species, *nibe*, has been used over a period of 66 years in four taxonomic papers, several less comprehensive and one major ecological work as well as in fishery statistics.

(c) The species, under the name *nibe*, has been made the type of a valid genus, *Atrobucca* Chu, Lo & Wu, 1963.

(d) The species is economically important.

9. I therefore request the International Commission on Zoological Nomenclature:

(1) to use its plenary powers to suppress the specific name *brunneolus* Jordan & Richardson, 1909, as published in the binomen *Pseudotolithus brunneolus*, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place on the Official List of Specific Names in Zoology: *nibe* Jordan & Thompson, 1911, as published in the binomen *Sciaena nibe;*

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology:
brunneolus Jordan & Richardson, 1909, as published in the binomen *Pseudotolithus brunneolus*, and suppressed by use of the plenary powers in (1) above.

PANOPEUS H. MILNE EDWARDS, 1834 (CRUSTACEA, DECAPODA): PROPOSED DESIGNATION OF TYPE SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 2236

by L.B. Holthuis *(Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands)*

The present case is that of a genus based on a misidentified type species, and the Commission is asked to use its plenary powers to make the continued use of the current name of the genus possible.

2. In 1834 H. Milne Edwards *(Histoire naturelle des Crustacés,* vol. 1: 403) erected the new genus *Panopeus* to which he assigned two species: *Panopeus herbstii* (a new species) and *Panopeus limosus,* a new combination for *Cancer limosa* Say (1818, *Acad. nat. Sci. Philadelphia,* vol. 1: 446). Two other species were doubtfully assigned by H. Milne Edwards to his new genus: *Cancer trispinosus* Herbst, 1803, and *Cancer ochtodes* Herbst, 1783.

3. In the synonymy of his new *Panopeus herbstii,* H. Milne Edwards cited *Cancer panope* Herbst (1801, *Versuch Naturgeschichte Krabben Krebse,* vol. 3(2): 40, pl. 54, fig. 5) and Say's (1817, *J. Acad. nat. Sci. Philadelphia,* vol. 1(1): 58, pl. 4, fig. 3) use of Herbst's name *Cancer panope* for an East American species. H. Milne Edwards did not indicate a type species for his genus *Panopeus,* neither did he indicate a holotype for *Panopeus herbstii.*

4. The material used by H. Milne Edwards for his description of *Panopeus herbstii* originated from "les côtes de l'Amérique septentrionale" and formed part of the collection of the Paris Museum. It belongs to the East American species of mud crab that at present still is indicated with the name *Panopeus herbstii.* The material that Say (1817: 58) reported upon as *Cancer panope* consists partly of *Panopeus herbstii* and partly of *Neopanope texana sayi* (Smith, 1869) (see Rathbun, 1930, *Bull. U.S. nat. Mus.,* vol. 152: 335, 369); Say's figure (pl. 4, fig. 3) shows *Panopeus herbstii.*

5. *Cancer panope* Herbst, 1801, is an Indo–West Pacific species, the type locality of which is Tranquebar, India. Balss (1932, *Zool. Anz.,* vol. 142(4): 513) showed that the species belongs in the genus *Sphaerozius* Stimpson, 1858. The generic name *Sphaerozius* Stimpson has been placed on the Official List of Generic Names in Zoology, as Name No. 372, in Opinion 85 (1925, *Smithson. miscell. Coll.,* vol. 73(3): 13, 17).

6. *Panopeus herbstii* H. Milne Edwards, 1834, thus is a composite species, being based (a) on material of the common East American mud crab that at present is best known as *Panopeus herbstii,* and on Say's (1817) figure and description of the same species, (b) on material of *Neopanope texana sayi* (Smith, 1869) with which Say's material of *Panopeus herbstii* was mixed, and (c) on the material of *Sphaerozius panope* (Herbst, 1801), which formed the type material of *Cancer panope* Herbst. So far as I know, no lectotype has ever been selected for *Panopeus herbstii* H. Milne Edwards, but all authors assigned the name to the common East American mud crab. To legalize this current practice, I now select as lectotype for *Panopeus herbstii* the specimen figured by Say (1817, *J. Acad. nat. Sci. Philadelphia,* vol. 1(1): pl. 4, fig. 3) under the name *Cancer panope.*

7. Now that the identity of the name *Panopeus herbstii* is fixed, that of the genus *Panopeus* should be discussed. The first type selection for the genus *Panopeus* that I know of is by E. Desmarest (1852, in Chenu, *Encyclopédie d'Histoire Naturelle* (Crustacés–Mollusques–Zoophytes): 17), who stated: *"Panopeus:* genre américain, ayant pour type le *Cancer panope,* Herbst, que M. Milne Edwards nomme Panopé d'Herbst". The type species of *Panopeus* H. Milne Edwards, 1834, thus is *Cancer panope* Herbst, 1801, as H. Milne Edwards, in the original description of *Panopeus herbstii* cited that species by name in the synonymy of his new species. Desmarest's type selection makes *Panopeus* H. Milne Edwards, 1834, a senior subjective synonym of *Sphaerozius* Stimpson, 1858, and thus would have to replace the latter, while the valid name for the genus of East American mud crabs known at present as *Panopeus* should become *Eupanopeus* Rathbun (1898, *Bull. Lab. nat. Hist. State Univ. Iowa,* vol. 4: 273) (type species by original designation: *Panopeus herbstii* H. Milne Edwards, 1834).

8. The name *Panopeus* has never been used for a species of *Sphaerozius* or any of the related genera. Although the name *Sphaerozius* probably is not well known by non-taxonomists, it figures in many handbooks and more restricted publications, especially as the genus has a wide range within the Indo–West Pacific region (Red Sea and S.E. Africa to Japan and Polynesia). To replace *Sphaerozius* Stimpson would be most inconvenient, the more so as it has already been placed on the Official List of Generic Names in Zoology.

9. On the other hand, the generic name *Panopeus* has become fully accepted for the common American mud crabs, not only in taxonomic literature but also in popular handbooks, in publications dealing with ecology, behaviour, etc. The range of the genus is not restricted to the East American coast (Bermuda and Massachusetts

to southern Brazil), but it is also found on the East Atlantic coast (S. Portugal to Angola), and on the West American coast (Mexico to Chile). The name *Eupanopeus* proposed by Rathbun in 1898 has never been fully accepted and was abandoned by Rathbun herself in 1910; since that time *Panopeus* has been consistently used for the genus. Several related genera have names derived from *Panopeus,* viz. *Eurypanopeus, Lophopanopeus, Hexapanopeus,* etc. To remove the name *Panopeus* from this group of genera to a quite different section of the family XANTHIDAE would cause a very serious confusion.

10. E. Desmarest (1852) when selecting the type species for *Panopeus,* clearly thought *Cancer panope* Herbst to be identical with *Panopeus herbstii* H. Milne Edwards, as he referred to the genus as a "genre américain". Desmarest's type selection thus is the result of a misidentification of the type species.

11. In order to make it possible to use the generic names discussed here in their accustomed sense, the International Commission on Zoological Nomenclature is now requested:

(1) to use its plenary powers
  (a) to set aside all type designations for the genus *Panopeus* H. Milne Edwards, 1834, made before the publication of this ruling, and having done so,
  (b) to designate *Panopeus herbstii* H. Milne Edwards, 1834, to be the type species of that genus;

(2) to place on the Official List of Generic Names in Zoology the name *Panopeus* H. Milne Edwards, 1834 (gender: masculine), type species designated under the plenary powers in (1)(b) above, *Panopeus herbstii* H. Milne Edwards, 1834;

(3) to place on the Official List of Specific Names in Zoology the name *herbstii* H. Milne Edwards, 1834, as published in the combination *Panopeus herbstii,* as defined by the lectotype designation in paragraph 6 above (specific name of type species of *Panopeus* H. Milne Edwards, 1834).

ANASPIS MÜLLER, 1764; *LUPERUS* MÜLLER, 1764; *LAMPYRIS* MÜLLER, 1764; AND *CLERUS* MÜLLER, 1764 (INSECTA: COLEOPTERA): PROPOSED DESIGNATION OF TYPE SPECIES. Z.N.(S.) 2240

by Hans Silfverberg *(Zoological Museum of the University, Helsinki, Finland)*

Geoffroy (1762) described a number of genera in a work which has been rejected for the purposes of nomenclature in Opinion 228. These generic names were next used together with descriptions by Müller (1764) who thereby made them nomenclaturally available, and he is accordingly the author. Müller did not, however, include any nominal species in these new genera. In such cases the nominal species that were first subsequently referred to the genus are to be treated as the only originally included species: Article 69a(ii).

2. Most of Müller's genera of 1764 will retain their customary use, but in two cases, namely *Anaspis* Müller (1764: xiv) and *Luperus* Müller (1764: xiii) this customary use would be upset if the Code was strictly applied. For two other genera, namely *Lampyris* Müller (1764: xvi) and *Clerus* Müller (1764: xii) the adoption of the valid type species designations under the Code would entail a change from this customary use. The object of this application is to ensure the stability of these names. The other genera proposed by Müller have been treated by Silfverberg (1978).

A. *Anaspis* Müller, 1764 (ANASPIDAE)

3. Müller (1776: 58) provided the only originally included species: *Chrysomela murina* Linnaeus, 1758, at present placed in *Isomira* Mulsant, 1856 (TENEBRIONIDAE).

4. Fourcroy (1785: 141) next used *Anaspis* for four species:

Anaspis nigra Fourcroy, 1785, not used since and at present a nomen dubium;

Anaspis bicolor Fourcroy, 1785, a junior subjective synonym of *Anaspis fasciata* (Forster, 1771) (= *humeralis* Fabricius, 1775, nec Linnaeus, 1758);

Mordella thoracica Linnaeus, 1758, at present placed in *Anaspis* Müller, 1764;

Anaspis maculata Fourcroy, 1785, at present placed in *Anaspis* Müller, 1764.

Thus Fourcroy used *Anaspis* in a sense agreeing with current

usage.

5. Latreille (1807: 210) used *Anaspis* for a single species *Mordella frontalis* Linnaeus, 1758, later cited as the type species of *Anaspis* by Latreille (1810: 430) and accepted as such from then on.

6. For far beyond 50 years there has been stable usage of *Anaspis* Müller based on *M. frontalis* as type species, as exemplified by the following key works: Porta (1934: 63), Sainte-Claire Deville (1937: 305), Horion (1951: 344), Ermisch (1956: 314), Lindroth (1960: 334), Ghilarov (1964: 438), Hansen (1964: 313), Stresemann (1964: 332), Gurjeva & Kryzhanovskij (1965: 346), Brakman (1966: 141) and Pope (1977: 69).

B. *Luperus* Müller, 1764 (CHRYSOMELIDAE)

7. Müller (1776: 83) provided four originally included species:

Chrysomela alni Linnaeus, 1758, at present placed in *Agelastica* Chevrolat, 1837;

Chrysomela quadrimaculata Linnaeus, 1758, at present placed in *Phyllobrotica* Chevrolat, 1837;

Luperus aeruginosus Müller, 1776, at present a nomen dubium; and

Luperus pallidus Müller, 1776, at present a nomen dubium.

8. Fourcroy (1785: 89) next used *Luperus*, for two species:

Luperus ulmarius Fourcroy, 1785, a junior subjective synonym of *Luperus luperus* (Sulzer, 1776); and

Luperus betulinus Fourcroy, 1785, also a junior subjective synonym of *Luperus luperus* (Sulzer, 1776). Thus Fourcroy used *Luperus* in a sense agreeing with current usage.

9. Olivier (1792: 588) used *Luperus* for a single species *Chrysomela flavipes* Linnaeus, 1767, later cited as type species of *Luperus* by Westwood (1838: 42) and accepted as such from then on.

10. For far beyond 50 years there has been stable usage of *Luperus* Müller based on *C. flavipes* as type species, as exemplified by the following key works: Porta (1934: 318), Sainte-Claire Deville (1937: 357), Horion (1951: 409), Lindroth (1960: 386), Ghilarov (1964: 527), Hansen (1964: 374), Stresemann (1964: 378), Gurjeva & Kryzhanovskij (1965: 450), Brakman (1966: 166), Wilcox (1973: 615) and Pope (1977: 74).

C. *Lampyris* Müller, 1764 (LAMPYRIDAE)

11. Linnaeus (1767: 643) provided 18 originally included species. Among these were:

Cantharis noctiluca Linnaeus, 1758, at present placed in *Lampyris* Müller;

Lampyris splendidula Linnaeus, 1767, at present placed in *Phausis* Le Conte, 1851, or in *Lamprohiza* Motschulsky, 1853.

12. Latreille (1810: 426) cited *L. splendidula* as type species of *Lampyris*. Later Westwood (1838: 27) cited *C. noctiluca* as type species of *Lampyris* and it has been accepted as such from then on.

13. For far beyond 50 years there has been stable usage of *Lampyris* Müller based on *C. noctiluca* as type species, as exemplified by the following key works: Porta (1929: 43), Sainte-Claire Deville (1935: 236), Horion (1951: 220), Lindroth (1960: 222), Ghilarov (1964: 360), Hansen (1964: 200), Stresemann (1964: 279), Gurjeva & Kryzhanovskij (1965: 224), Brakman (1966: 90), McDermot (1966: 2) and Pope (1977: 52).

D. *Clerus* Müller, 1764 (CLERIDAE)

14. Fabricius (1775: 157, 823) provided five originally included species. Among these were:

Clerus mutillarius Fabricius, 1775, at present placed in *Clerus* Müller; and

Attelabus apiarius Linnaeus, 1758, at present placed in *Trichodes* Herbst, 1792.

15. Latreille (1810: 427) cited *Clerus alvearius* Fabricius, 1792, as type species of *Clerus*, but this species was not originally included by Fabricius.

16. Westwood (1838: 28) cited *A. apiarius* as type species of *Clerus*. Yet long before, Herbst (1792: 154) had established *Trichodes* which included *A. apiarius*, and that genus was soon accepted into general use.

17. Hope (1840: 137) cited *C. mutillarius* as type species of *Clerus*, and cited *A. apiarius* as type species of *Trichodes*.

18. Spinola (1844: 185) in his world monograph included *C. mutillarius* in *Thanasimus* Latreille, 1806, and included *A. apiarius* (: 305) in *Trichodes*, while *Clerus* was used for many non-European species, none of which had been originally included by Fabricius.

19. Jacquelin du Val (1861: 196) described a new genus, *Pseudoclerops*, for *C. mutillarius*, and kept *A. apiarius* in *Trichodes*. Schenkling (1910: 59, 84) also used these genera for the two species. Corporaal (1950: 165) reverted to the use of *Clerus* for *C. mutillarius*.

20. Under the Code, Westwood's designation of *A. apiarius* as type species of *Clerus* Müller, 1764, is valid and *Trichodes* Herbst, 1792 is its junior objective synonym. However, while the use of *Clerus* has been somewhat vacillating, the use of *Trichodes* has been undisturbed for more than a century. The continued stability of *Trichodes* is best ensured by using the plenary powers to fix *C. mutillarius* as the type species of *Clerus* in accordance with general

current usage. The use of *Trichodes* for a genus based on *A. apiarius* as type species during the past 50 years is exemplified by the following key works: Porta (1929: 134), Sainte-Claire Deville (1935: 249), Corporaal (1950: 209), Horion (1951: 233), Lindroth (1960: 230), Ghilarov (1964: 365), Hansen (1964: 210), Stresemann (1964: 283), Gurjeva & Kryzhanovskij (1965: 237), Brakman (1966: 95) and Pope (1977: 55).

21. In order to ensure stability for these generic names the International Commission on Zoological Nomenclature is requested:

(1) to use its plenary powers to set aside all fixations of type species hitherto made for:
   (a) *Anaspis* Müller, 1764 and then to designate *Mordella frontalis* Linnaeus, 1758, as type species of that genus;
   (b) *Luperus* Müller, 1764 and then to designate *Chrysomela flavipes* Linnaeus, 1767, as type species of that genus;
   (c) *Lampyris* Müller, 1764 and then to designate *Cantharis noctiluca* Linnaeus, 1758, as type species of that genus; and
   (d) *Clerus* Müller, 1764 and then to designate *Clerus mutillarius* Fabricius, 1775, as type species of that genus.

(2) to place on the Official List of Generic Names in Zoology:
   (a) *Anaspis* Müller, 1764 (gender: feminine), type species designated by use of the plenary powers in (1)(a) above, *Mordella frontalis* Linnaeus, 1758;
   (b) *Luperus* Müller, 1764 (gender: masculine), type species designated by use of the plenary powers in (1)(b) above, *Chrysomela flavipes* Linnaeus, 1767;
   (c) *Lampyris* Müller, 1764 (gender: feminine), type species designated by use of the plenary powers in (1)(c) above, *Cantharis noctiluca* Linnaeus, 1758;
   (d) *Clerus* Müller, 1764 (gender: masculine), type species designated by use of the plenary powers in (1)(d) above, *Clerus mutillarius* Fabricius, 1775; and
   (e) *Trichodes* Herbst, 1792 (gender: masculine), type species designated by Hope (1840: 137) *Attelabus apiarius* Linnaeus, 1758.

(3) to place on the Official List of Specific Names in Zoology:
   (a) *frontalis* Linnaeus, 1758, as published in the bino-

men *Mordella frontalis* (specific name of the type species of *Anaspis* Müller, 1764);

(b) *flavipes* Linnaeus, 1767, as published in the binomen *Chrysomela flavipes* (specific name of the type species of *Luperus* Müller, 1764);

(c) *noctiluca* Linnaeus, 1758, as published in the binomen *Cantharis noctiluca* (specific name of the type species of *Lampyris* Müller, 1764);

(d) *mutillarius* Fabricius, 1775, as published in the binomen *Clerus mutillarius* (specific name of the type species of *Clerus* Müller, 1764); and

(e) *apiarius* Linnaeus, 1758, as published in the binomen *Attelabus apiarius* (specific name of the type species of *Trichodes* Herbst, 1792).

REFERENCES

BRAKMAN, P.J. 1966. Lijst van Coleoptera uit Nederland en het omliggend gebied. *Monogr. Nederl. Entomol. Vereen,* vol. 2: 1–219.

CORPORAAL, J.B. 1950. Cleridae. *Coleopt. Catal.* Suppl., vol. 23: 1–373.

ERMISCH, K. 1956. Mordellidae, in Horion, *Faunstik der mitteleuropäischen Käfer,* vol. V: 269–328.

FABRICIUS, J.C. 1775. *Systema Entomologiae.* Flensburgi et Lipsiae, 1–832.

FOURCROY, A.F. 1785. *Entomologia parisiensis, sive catalogus Insectorum quae in agro parisiensi reperiuntur,* vol. I. Paris, 1–231.

GEOFFROY, E.L. 1762. *Histoire abrégée des insectes qui se trouvent aux environs de Paris,* vol. I. Paris, 1–523.

GHILAROV, M.S. (ed.) 1964. *Opredelitel' obitayushchikh v pochve lichinok nasekomykh.* Moskva, 1–920.

GURJEVA, E.L. & KRYZHANOVSKIJ, O.L. (ed.) 1965. Opredelitel' nasekomyh evropejskoi chasti SSSR. II. Zhestkokrylye i veerokrylye. *Opred. faune SSSR,* vol. 89: 1–668.

HANSEN, V. 1964. Fortegnelse over Danmarks biller. *Entomol. Meddel.,* vol. 33: 1–507.

HERBST, J.F.W. 1792. *Natursystem aller bekannten in- und ausländischen Insekten. Käfer,* vol. IV. Berlin, 1–197.

HOPE, F.W. 1840. *The Coleopterist's Manual,* vol. III. London, 1–191.

HORION, A. 1951. *Verzeichnis der Käfer Mitteleuropas.* Stuttgart, 1–536.

JACQUELIN DU VAL, P.N.C. 1861. Famille des Clérides. *Genera des Coléoptères d'Europe,* vol. III: 193–202.

LATREILLE, P.A. 1807. *Genera Crustaceorum et Insectorum* II. Parisiis et Argentorati, 1–280.

———— 1810. *Considérations générales sur l'ordre naturel des Crustacés, Arachnides et Insectes.* Paris, 1–444.

LINDROTH, C.H. (ed.) 1960. *Catalogus Coleopterorum Fennoscandiae et Daniae.* Lund, 1–476.

LINNAEUS, C. 1758, *Systema Naturae* (edn 10). Holmiae, 1–823.
_____1767. *Systema Naturae* (edn 12), vol. I, pt. II. Holmiae, 553–1327.
McDERMOT, F.A. 1966. Lampyridae. *Coleopt. Catal.* Suppl. vol. 9: 1–149.
MÜLLER, O.F. 1764. *Fauna Insectorum Fridrichsdalina.* Hafniae et Lipsiae, i–xxiv + 1–96.
_____1776. *Zoologiae Danicae Prodromus.* Havniae, 1–282.
OLIVIER, A.G. 1792. *Encyclopédie méthodique.* Histoire Naturelle VII. Insectes (H-M). – Paris, 1–827.
POPE, R.D. 1977. In Kloet & Hincks, *A check list of British insects* (II edn), Part 3: Coleoptera and Strepsiptera. Handb. Ident. Brit. Ins. XI(3): 1–105.
PORTA, A. 1929-1934. *Fauna Coleopterorum Italica,* vol. III–IV. Piacenza, 1–466, 1–415.
SAINTE-CLAIRE DEVILLE, J. 1935. *Catalogue raisonné des Coléoptères de France.* L'Abeille vol. 36: 1–467.
SCHENKLING, S. 1910. Cleridae. *Coleopt. Catal.* vol. 23: 1–174.
SILFVERBERG, H. 1978. The coleopteran genera of Müller 1764. *Notul. ent.* vol. 58: 117–119.
SPINOLA, M. 1844. Essai monographique sur les Clerites I. Gènes, 1–386.
STRESEMANN, E. 1964. Exkursionsfauna von Deutschland. Insekten I. Berlin, 1–518.
WESTWOOD, J.O. 1838. Synopsis of the genera of British insects (part). London, 1–48.
WILCOX, J.A. 1973. Chrysomelidae: Galerucinae, Luperini: Luperina. *Coleopt. Catal.* Suppl. vol. 78: 433–664.

PTILIUM GYLLENHAL, 1827 AND *PTENIDIUM* ERICHSON, 1845 (INSECTA, COLEOPTERA): PROPOSED CONSERVATION BY USE OF THE PLENARY POWERS. Z.N.(S.) 2244

By Hans Silfverberg *(Zoological Museum of the University, Helsinki, Finland)*

The generic name *Ptilium*, the type genus of the PTILIIDAE, was established by Gyllenhal, 1827: 292, as a subgenus of *Scaphidium*. He included in it four species: *atomarium, fasciculare, evanescens* and *punctatum*. The first two are nowadays included in the genus *Acrotrichis* Motschulsky, 1848, the other two in the genus *Ptenidium* Erichson, 1845.

2. After Gyllenhal the name *Ptilium* was used by several authors, such as Aubé, 1833; Dejean, 1833; and Villa, 1833. They used it in combination with different specific names. Only when Erichson, 1845, used the name in a revisionary work the usage began to stabilize. Thomson, 1859, designated *Elophorus minutissimus* Gyll. – should be Ljungh – to be type of the genus. This species was not among those originally included, and moreover it has been included in the genus or subgenus *Millidium* Motschulsky, 1855 for a long time.

3. Stephens, 1830: 61, established *Anisarthria* for eight species. Westwood, 1838: 14, designated one of them, *Dermestes melas* Marsham, 1802: 78, to be the type species. This species is currently considered to by a synonym of *Ptenidium pusillum* (Gyllenhal, 1808). Neither *Anisarthria* nor *melas* has been used as a valid name during this entire century.

4. Erichson, 1845: 34, established *Ptenidium*, for five species. Thomson, 1859: 63, designated one of them, *Scaphidium pusillum* Gyllenhal, 1808: 189, as the type species. The name *Ptenidium* has been used in this sense ever since.

5. The genus *Ptilium* Gyllenhal is without a validly designated type species, but it has been used in a uniform way for a century or more. To change it now would only lead to confusion. Therefore I suggest that the Commission use its plenary powers to designate *Ptilium caesum* Erichson, 1845: 26, a nominal species not originally included in *Ptilium*, as the type species. In this way current use can be preserved. Another way could be to suppress all usages of the generic name *Ptilium* prior to that of Erichson, 1845, both for the purposes of priority and homonymy, but I prefer the former solution. Since *Anisarthria* Stephens is an unused senior synonym

of *Ptenidium* Erichson it should be rejected so as to preserve current use. Examples of current use are Sainte-Claire Deville, 1935; Horion, 1949; Hatch, 1957; Lindroth, 1960; Hansen, 1964; Kryzhanovskij, 1965; Brakman, 1966; Besuchet, 1971; Johnson, 1975; and Pope, 1977.

6. Since *Dermestes melas* is a subjective synonym of *Scaphidium pusillum,* the generic name *Anisarthria* is a subjective synonym of *Ptenidium.* In such a case I think the Commission should not totally suppress the unused senior synonyms, but give the junior, commonly used ones nomenclatural precedence.

7. The International Commission on Zoological Nomenclature is therefore requested:

(1) to use its plenary powers:
   (a) to set aside any fixations of type species hitherto made for *Ptilium* Gyllenhal, 1827, and then to designate *Ptilium caesum* Erichson, 1845 as its type species;
   (b) to rule that *Ptenidium* Erichson, 1845, is to be given nomenclatural precedence over *Anisarthria* Stephens, 1830, whenever the two names are considered to be synonyms;
   (c) to rule that *pusillum* Gyllenhal, 1808, as published in the binomen *Scaphidium pusillum,* is to be given nomenclatural precedence over *melas* Marsham, 1802, as published in the binomen *Dermestes melas,* whenever the two names are considered to be synonyms;

(2) to place on the Official List of Generic Names in Zoology:
   (a) *Ptilium* Gyllenhal, 1827 (gender: neuter), type species, by use of the plenary powers in (1)(a) above, *Ptilium caesum* Erichson, 1845;
   (b) *Ptenidium* Erichson, 1845 (gender: neuter), type species, by subsequent designation by Thomson, 1859, *Scaphidium pusillum* Gyllenhal, 1808, with an endorsement that it is to be given precedence over *Anisarthria* Stephens, 1830, whenever the two names are considered to be synonyms;
   (c) *Anisarthria* Stephens, 1830 (gender: feminine), type species, by subsequent designation by Westwood, 1838, *Dermestes melas* Marsham, 1802, with an endorsement that it is not to be given priority over *Ptenidium* Erichson, 1845, whenever the two names are considered to be synonyms;

(3) to place on the Official List of Specific Names in Zoology:

(a) *caesum* Erichson, 1845, as published in the binomen *Ptilium caesum* (specific name of the type species of *Ptilium* Gyllenhal, 1827);

(b) *pusillum* Gyllenhal, 1808, as published in the binomen *Scaphidium pusillum* (specific name of the type species of *Ptenidium* Erichson, 1845) with an endorsement that it is to be given precedence over *melas* Marsham, 1802, as published in the binomen *Dermestes melas*, whenever the two names are considered to be synonyms;

(c) *melas* Marsham, 1802, as published in the binomen *Dermestes melas* (specific name of the type species of *Anisarthria* Stephens, 1830), with an endorsement that it is not to have priority over the specific name *pusillum* Gyllenhal, 1808, as published in the binomen *Scaphidium pusillum*, whenever the two names are considered to be synonyms.

REFERENCES

AUBE, C. 1833. Description de deux Coléoptères nouveaux, des genres *Ptilium* et *Hister*. *Ann. Soc. Entomol. France*, vol. 2: 94–96.

BESUCHET, C. 1971. 21. Fam. Ptiliidae. In Freude, Harde & Lohse, *Die Käfer Mitteleuropas*, vol. 3: 311–334.

BRAKMAN, P.J. 1966. Lijst van Coleoptera uit Nederland en het omliggend gebied. *Monogr. Nederl. Entomol. Vereen.*, vol. 2: 1–219.

DEJEAN, J.A. 1833. *Catalogue des Coléoptères de la collection de M. le comte Dejean.* 2nd edit. Paris: 97–176.

ERICHSON, W.F. 1845. *Naturgeschichte der Insekten Deutschlands*, vol. 3: 1–320. Berlin.

GYLLENHAL, L. 1808. *Insecta Suecica.* Classis I. Coleoptera sive Eleuterata. T.I., Pars 1. Scaris: 1–572.

———1827. id., Pars 4. Lipsiae: 1–762.

HANSEN, V. 1964. Fortegnelse over Danmarks biller. *Entomol. Meddel.*, vol. 33: 1–507.

HATCH, M.H. 1957. *The Beetles of the Pacific Northwest.* Part II. Seattle: 1–384.

HORION, A. 1949. *Faunistik der Mitteleuropäischen Käfer* II. Frankfurt am Main: 1–388.

JOHNSON, C. 1975. Five species of Ptiliidae (Col.) new to Britain, and corrections to the British list of the family. *Entomol. Gaz.*, vol. 26: 211–223.

KRYZHANOVSKIJ, O.L. 1965. Sem. Ptiliidae (Trichopterygidae) Perokrylki. *Opred. Faune SSSR*, vol. 89: 162–163.

LINDROTH, C.H. (ed.) 1960. *Catalogus Coleopterorum Fennoscandiae et Daniae.* Lund: 1–476.

MARSHAM, T. 1802. *Entomologia Britannica.* Londini: 1–547.

POPE, R.D. 1977. in Kloet & Hincks, A check list of British insects (2nd edit.), Part 3: Coleoptera and Strepsiptera. *Handb. Ident. Brit. Ins.* vol. XI(3): 1–105.

SAINTE-CLAIRE DEVILLE, J. 1935. Catalogue raisonné des Coléoptères de France. *L'Abeille,* vol. 36: 161–264.

STEPHENS, J.F. 1830. *Illustrations of British entomology.* Mandibulata, vol. III. London: 1–374.

THOMSON, C.G. 1859. *Skandinaviens Coleoptera,* I Tom. Lund: 1–290.

VILLA, A. & J.B. 1833. *Coleoptera Europae dupleta in collectione Villa.* Mediolani: 1–36.

WESTWOOD, J.O. 1838. *Synopsis of the genera of British insects* (part). London: 1–48.

CHRYSOMELA FLAVICORNIS SUFFRIAN, 1851, AND *C. TIBIALIS* SUFFRIAN, 1851 (INSECTA, COLEOPTERA): PROPOSED CONSERVATION OF THESE JUNIOR PRIMARY HOMONYMS BY USE OF THE PLENARY POWERS. Z.N.(S.) 2246

By Hans Silfverberg *(Zoological Museum of the University, Helsinki, Finland)*

Fabricius, 1787: 73, established *Chrysomela flavicornis,* and it was used as such by Gmelin, 1790. Later Fabricius, 1792, transferred it to the genus *Galleruca* and then (Fabricius, 1801) to the genus *Colaspis.* Schönherr, 1808, used it as *Colaspis flavicornis,* and synonymized *Chrysomela occidentalis* Linnaeus, 1758, with it; he gave precedence to Fabricius's name, and *occidentalis* was still listed under that name by Dejean, 1821, 1837, and Steven, 1829. Once the rule of priority had been accepted, the species was known as *Colaspis occidentalis* (L.), with the name *flavicornis* listed only as a junior synonym (Gemminger & Harold, 1874; Lefèvre, 1885; Clavareau, 1914; Blackwelder, 1946). When Bechyné, 1950, established *Maecolaspis* with *occidentalis* as type species he mentioned *Colaspis flavicornis* Fabricius, 1801 (sic!) as a synonym, but in later lists (Bechyné 1953, 1968) the name did not even occur in synonymy.

2. Duftschmid, 1825: 202, established *Chrysomela tibialis,* with several varieties. Heer, 1834, listed it as a synonym of *Chrysomela viminalis* Linnaeus, 1758 (= *Gonioctena viminalis*), and Redtenbacher, 1849, 1874, did the same. Suffrian, 1851, observed that Duftschmid's *tibialis* was a conglomerate of several species, namely *C. flavicornis* Suffrian, 1851: 215, *C. triandrae* Suffrian, 1851: 216, and (one variety) *C. viminalis* L., 1758: 211 – all these species are nowadays placed in the genus *Gonioctena.* The "typical" *C. tibialis* Duftschmid corresponded to Suffrian's *C. triandrae,* which is a synonym of *Chrysomela linnaeana* Schrank, 1781 (=*Gonioctena linnaeana*). It should also be observed that Redtenbacher's *Gonioctena viminalis* (L.) in fact included several species, among them *G. linnaeana.* After Suffrian's revision, the name *tibialis* Duftschmid was listed only as a synonym of *Gonioctena linnaeana* (or *triandrae*) in works such as Gemminger & Harold, 1874; Heyden *et al.,* 1883; Weise, 1884; Seidlitz, 1891; Grill, 1896; Reitter, 1912; Weise, 1916; and Bechyné, 1947. Because Duftschmid's name covered several species the synonymy was

sometimes qualified by a phrase such as "partim". In works without pretentions to a complete synonymy the name was simply not mentioned.

3. Suffrian, 1851, described numerous species of *Chrysomela,* among them *C. flavicornis* (: 215) and *C. tibialis* (: 259). Of these the former is nowadays known as *Gonioctena flavicornis* (or *Phytodecta flavicornis*), the latter as *Phratora tibialis* (or *Phyllodecta tibialis*). Suffrian's names have been in continuous use, during the last fifty years, for instance, in the following works: Porta, 1934; Sainte-Claire Deville, 1935-38; Bechyné, 1947; Müller, 1949-53; Horion, 1951; Lindroth, 1960; Hansen, 1964; Medvedev & Shapiro, 1965; Brakman, 1966; Mohr, 1966; Cantonnet, 1968; and Warchalowski, 1973.

4. Suffrian's names are junior primary homonyms, and should as such be replaced. Yet that would be an unfortunate action, which would cause instability and confusion. Since the senior homonyms are unused, it is preferable that they should be suppressed by use of the plenary powers for the purposes of both the Law of Priority and the Law of Homonymy. This solution would be in accordance with the object of the *Code* to promote stability.

5. The International Commission on Zoological Nomenclature is therefore requested:

(1) to use its plenary powers:

(a) to suppress the specific name *flavicornis* Fabricius, 1787, as published in the binomen *Chrysomela flavicornis,* for the purposes of both the Law of Priority and the Law of Homonymy;

(b) to suppress the specific name *tibialis* Duftschmid, 1825, as published in the binomen *Chrysomela tibialis,* for the purposes of both the Law of Priority and the Law of Homonymy;

(2) to place on the Official List of Specific Names in Zoology:

(a) *flavicornis* Suffrian, 1851, as published in the binomen *Chrysomela flavicornis;*

(b) *tibialis* Suffrian, 1851, as published in the binomen *Chrysomela tibialis;*

(3) to place on the Official Index of Rejected and Invalid Specific names in Zoology:

(a) *flavicornis* Fabricius, 1787, as published in the binomen *Chrysomela flavicornis* and suppressed by use of the plenary powers in (1)(a) above;

(b) *tibialis* Duftschmid, 1825, as published in the binomen *Chrysomela tibialis* and suppressed by

use of the plenary powers in (1)(b) above.

REFERENCES

BECHYNÉ, J. 1947. Příspěvek k poznání rodu *Phytodecta* Kirby. Additamenta ad cognitionem specierum generis *Phytodecta* Kirby. (Col. Phytoph. Chrysomelidae). *Sb. Národ. Mus. Praze*, vol. IIIB: 89–158.

———— 1950. Les générotypes des Eumolpides de l'Amérique du Sud et du Centre avec les diagnoses des formes nouvelles (Col. Phytoph. Chrysomeloidea). *Mitt. Münchn. Entomol. Ges.* vol. 40: 264–292.

———— 1953. Katalog der neotropischen Eumolpiden (Col. Phytoph. Chrysomeloidea). *Entomol. Arb. Mus. Frey*, vol. 4: 26–303.

BECHYNÉ, J. & BECHYNÉ, B. ŠPRINGLOVA DE. 1968. Notas sobre el genero *Colaspis* (Col. Phytophaga Eumolpidae). *Mem. Soc. Cienc. Nat. La Salle*, vol. 28: 225–264.

BLACKWELDER, R.E. 1946. Checklist of the coleopterous insects of Mexico, Central America, the West Indies and South America. Part 4. *Bull. U.S. nat. Mus.* no. 185: 551–763.

BRAKMAN, P.J. 1966. Lijst van Coleoptera uit Nederland en het omliggend gebied. *Monogr. Nederl. Entomol. Vereen*, vol. 2: 1–219.

CANTONNET, F. 1968. Révision des espèces françaises du genre *Phytodecta* et description d'une espèce nouvelle (Col. Chrysomelidae). *L'Entomologiste*, vol. 24: 38–49.

CLAVAREAU, H. 1914. Chrysomelidae. 11. Subfam. Eumolpinae. *Coleopt. Catal.*, vol. 59: 1–215.

DEJEAN, J.A. 1821. *Catalogue de la collection de Coléoptères de M. le Baron Dejean.* Paris: 1–136.

———— 1837. *Catalogue des Coléoptères de la collection de M. le Comte Dejean.* 3rd edit. Paris: 1–503.

DUFTSCHMID, C. 1825. *Fauna Austriae*, vol. 3, Linz: 1–289.

FABRICIUS, J.C. 1787. *Mantissa Insectorum* I. Hafniae: 1–384.

———— 1792. *Entomologia Systematica* I, 2. Hafniae: 1–538.

———— 1801. *Systema Eleutheratorum* I. Kiliae: 1–506.

GEMMINGER, M. & HAROLD, B. DE. 1874. *Catalogus coleopterorum hucusque descriptorum synonymicus et systematicus*, vol. 11. Monachii: 3233–3478.

GMELIN, J.F. 1790. *Caroli a Linné Systema Naturae* (ed. XIII) I, 4. Lipsiae: 1517–2224.

GRILL, C. 1896. *Catalogus coleopterorum Scandinaviae, Daniae et Fenniae.* Holmiae: 1–427.

HANSEN, V. 1964. Fortegnelse over Danmarks biller. *Entomol. Medd.*, vol. 33: 1–507.

HEER, O. 1834. Geographische Verbreitung der Käfer in den Schweizeralpen, besonders nach ihren Höhenverhältnissen. *Mitt. Theor. Erdkd*, vol. 1: 36–98.

HEYDEN, L.v., REITTER, E. & WEISE, J. 1883. *Catalogus Coleopterorum Europae et Caucasi.* 3rd edit. Berolini: 1–228.

HORION, A. 1951. *Verzeichnis der Käfer Mitteleuropas.* Stuttgart: 1–536.

LEFÈVRE, E. 1885. Eumolpidarum hucusque cognitarum catalogus. *Mém. Soc. r. Sci. Liège*, 2 sér., vol. 11 (16): 1–172.
LINDROTH, C.H. (ed.) 1960. *Catalogus Coleopterorum Fennoscandiae et Daniae*. Lund: 1–476.
MEDVEDEV, L.N. & SHAPIRO, D.S. 1965. 76. Sem. Chrysomelidae, Listoedy. *Opred. Faune SSSR*, vol. 89: 419–474.
MOHR, K.H. 1966. 88. Fam. Chrysomelidae, in Freude, Harde & Lohse, *Die Käfer Mitteleuropas*, vol. 9: 95–280.
MÜLLER, G. 1949-53. *I Coleotteri della Venezia Giulia*. Trieste: 1–685.
PORTA, A. 1934. *Fauna Coleopterorum Italica*, vol. 4. Piacenza: 1–415.
REDTENBACHER, L. 1849. *Fauna Austriaca*. Wien: 1–883.
_____ 1874. id., 3rd edit., vol. 2. Wien: 1–571.
REITTER, E. 1912. *Fauna Germanica*. Käfer IV. Stuttgart: 1–236.
SAINTE-CLAIRE DEVILLE, J. 1935-38. Catalogue raisonné des Coléoptères de France. *L'Abeille*, vol. 36: 1–467.
SCHÖNHERR, C.J. 1808. *Synonymia Insectorum* II. Stockholm: 1–524.
SEIDLITZ, G. 1891. *Fauna Baltica*, 2nd edit. Königsberg: 1–818.
STEVEN, C.v. 1829. *Museum Historiae Naturalis Universitatis Caesareae Mosquensis*. Pars 2, Insecta. Mosquae: 1–147.
SUFFRIAN, E. 1851. Zur Kenntniss der Europäischen Chrysomelen. *Linnaea Entomol.*, vol. 5: 1–280.
WARCHALOWSKI, A. 1973. Cześć XIX Chrzaszcze – Coleoptera. Zeszyt 94b Stonkowate – Chrysomelidae. Podrodziny: Chrysomelinae i Galerucinae. – *Klucze Oznacz. Owadów Polski*, vol. 80: 1–97.
WEISE, J. 1884. *Naturgeschichte der Insekten Deutschlands*. I. Coleoptera VI(3): 369–568. Berlin.
_____ 1916. Chrysomelidae: 12. Chrysomelinae. *Coleopt. Catal.* vol. 68: 1–255.

EDWARDSIA COSTA, 1834 (ARTHROPODA, CRUSTACEA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS WITH CONSERVATION OF *EDWARDSIA* DE QUATREFAGES, 1841 AND EDWARDSIIDAE ANDRES, 1881 (COELENTERATA: ACTINIARIA). Z.N.(S.) 2261

By R.B. Williams *(2 Carrington Place, Tring, Herts. HP23 5LA)*

The genus-group name *Edwardsia* has been proposed in five separate publications for various taxa (see Neave, 1939a: 197). The senior homonym, *Edwardsia* Costa, 1834, was long ago synonymized with *Sapphirina* Thompson, 1829, the name of a poecilostomatoid copepod (see Giesbrecht, 1892: 618).

2. The oldest junior homonym, *Edwardsia* de Quatrefages, 1841, on the other hand, has been used regularly up to the present time: it is the name of one of the largest genera of sea-anemones known (see Carlgren, 1949) and the type genus of the family EDWARDSIIDAE Andres, 1881 (:333). [Furthermore, the genus has given its name to the transient *Edwardsia* stage which in many anemone species is characteristic of actinian ontogeny, since the arrangement of the larval mesenteries is that of the eight macrocnemes of an adult *Edwardsia.* The term '*Edwardsia* stage' has been in use continuously since the last century (McMurrich, 1889; Duerden, 1899; Stephenson, 1928; Riemann-Zürneck, 1976) and has become well established, together with the genus *Edwardsia* as a morphological type of simple actinian, in student text-books (Bourne, 1900; Hickson, 1906; Hyman, 1940; Borradaile, Eastham, Potts and Saunders, 1961).]

3. When the genus *Edwardsia* de Quatrefages, 1841 was established, no nominal species were included. The first nominal species to be referred to the genus were *E. beautempsii* de Quatrefages, 1842 (:69), *E. timida* de Quatrefages, 1842 (:70) and *E. harassi* de Quatrefages, 1842 (:71). Carlgren (1949) subsequently designated *E. beautempsii* as the type species.

4. Thus the little-used and now synonymized *Edwardsia* Costa, 1834 threatens the established usage of *Edwardsia* de Quatrefages, 1841. Confusion would be caused by the use of a replacement name for *Edwardsia* de Quatrefages, 1841, since this well-established genus-group name would fall out of use and, incidentally, the term '*Edwardsia* stage' would be rendered apparently illogical. The latter point, though not covered by the Code, is important to physiologists. Furthermore, standard student text-

books referring to *Edwardsia* as a morphological type would no longer have currency.

5. The family-group name EDWARDSIIDAE Andres, 1881 (originally published as EDWARDSIDAE) is invalid since the name of its nominal type genus, *Edwardsia* de Quatrefages, 1841, is a junior homonym. The replacement of such a well known family name would cause considerable confusion amongst both systematists and physiologists.

6. Nomenclatural stability would best be served by the following suggested actions. The International Commission on Zoological Nomenclature is requested:

(1) to use its plenary powers to suppress the genus-group name *Edwardsia* Costa, 1834 for the purposes both of the Law of Priority and the Law of Homonymy.

(2) to place the genus-group name *Edwardsia* de Quatrefages, 1841 (gender feminine), type species by subsequent designation by Carlgren (1949) *E. beautempsii* de Quatrefages, 1842, on the Official List of Generic Names in Zoology.

(3) to place the specific name *beautempsii* de Quatrefages, 1842, as published in the binomen *Edwardsia beautempsii* (specific name of type species of *Edwardsia* de Quatrefages, 1841) on the Official List of Specific Names in Zoology.

(4) to place the family-group name EDWARDSIIDAE Andres, 1881, type genus *Edwardsia* de Quatrefages, 1841, on the Official List of Family-Group Names in Zoology.

(5) to place the genus-group name *Edwardsia* Costa, 1834, as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Generic Names in Zoology.

7. The question of the availability of the name *Milnea* Reichenbach *in* Wright, 1866 (:782) requires consideration here. It was listed by Neave (1940: 176) as a replacement name for *Edwardsia* de Quatrefages, 1841 and, if available, it would require to be suppressed concomitantly with the conservation of *Edwardsia* de Quatrefages. Furthermore, if available, it would invalidate the junior homonym *Milnea* Lydekker, 1891, a name long used for a genus of fossil birds (Lambrecht, 1933: 530; Brodkorb, 1967: 203; Cracraft, 1972: 41-43). However, *Milnea* Reichenbach, 1866 is not available under the present Code since Wright (1866) merely cited the proposed replacement name apparently without accepting it as a substitute for *Edwardsia* de Quatrefages and without giving any bibliographical indication as required by the Code. I have been

unable to find any publication before 1891 in which Reichenbach or any other author made *Milnea* Reichenbach an available name: therefore it does not require suppression and *Milnea* Lydekker is a potentially valid name.

8. The three youngest homonyms of *Edwardsia* have had the following replacement names proposed (see Neave, 1939a: 197, 323, 351; Neave, 1939b: 676; Neave, 1940: 769): *Pisanella* Koenen, 1865(a) for *Edwardsia* Koenen, 1865(b) (Mollusca: Gastropoda); *Eupseudomorpha* Dyar, 1893 for *Euedwardsia* Kirby, 1892 for *Edwardsia* Neumoegen, 1880 (Arthropoda: Lepidoptera) [The replacement name *Euedwardsia* Kirby, 1892 was preoccupied by *Euedwardsia* Grote, 1882 (Arthropoda: Lepidoptera).]; *Chattendenia* Tutt, 1908 for *Edwardsia* Tutt, 1907 (Arthropoda: Lepidoptera) [Volume 9 of J.W. Tutt's *Natural History of the British Lepidoptera* is identical to and was published simultaneously with Volume 2 of his *Natural History of British Butterflies.* The dates on the title pages of both works give incomplete information but the actual dates of publication were clarified by Townsend and England (1938).]

REFERENCES

ANDRES, A., 1881. Prodromus neapolitanae actiniarum faunae addito generalis actiniarum bibliographiae catalogo. *Mitt. zool. Stn Neapel* vol. 2: 305–371.

BORRADAILE, L.A., EASTHAM, L.E.S., POTTS, F.A., and SAUNDERS, J.T., 1961. *The Invertebrata,* 4th edition revised by G.A. Kerkut, University Press, Cambridge.

BOURNE, G.C., 1900. The Anthozoa. In E.R. Lankester ed., *A Treatise on Zoology,* Part II, Adam and Charles Black, London.

BRODKORB, P., 1967. Catalogue of fossil birds. Part 3 (Ralliformes, Ichthyornithiformes, Charadriiformes). *Bull. Fla St. Mus. biol. Sci.* vol. 11: 99–220.

CARLGREN, O., 1949. A survey of the Ptychodactiaria, Corallimorpharia and Actiniaria. *K. svenska VetenskAkad. Handl., Fjarde Serien* vol. 1(1): 1–121.

COSTA, O.G., 1834. *Cenni zoologici, ossia descrizione sommaria delle specie nuove di animali discoperti in diverse contrade del regno nell'anno 1834.* Naples.

CRACRAFT, J., 1972. A new Cretaceous charadriiform family. *Auk* vol. 89: 36–46.

DUERDEN, J.E., 1899. The *Edwardsia*-stage of the actinian *Lebrunia,* and the formation of the gastro-coelomic cavity. *J. Linn. Soc. (Zool.)* vol. 27: 269–316.

DYAR, H.G., 1893. [Book review of *A Synonymic Catalogue of Lepidoptera Heterocera (Moths)* by W.F. Kirby, 1892.] *Can. Ent.* vol. 25: 28.

GIESBRECHT, W., 1892. Systematik und Faunistik des pelagischen Copepoden des Golfes von Neapel und der angrenzenden Meeresabschnitte. *Fauna Flora Golf. Neapel* vol. 19: 1–831.

GROTE, A.R., 1882. Notes on Lepidoptera. *Papilio* vol. 2: 122.

HICKSON, S.J., 1906. Coelenterata and Ctenophora. In S.F. Harmer and A.E. Shipley eds., *The Cambridge Natural History*, Vol. 1, MacMillan and Co., London.

HYMAN, L.H., 1940. *The Invertebrata: Protozoa through Ctenophora.* McGraw-Hill, New York and London.

KIRBY, W.F., 1892. *A Synonymic Catalogue of Lepidoptera Heterocera (Moths), Vol. 1, Sphinges and Bombyces*, Gurney and Jackson, London.

KOENEN, A., 1865a. Nachtrag zu dem Aufsatze über die Helmstädter Fauna. *Z. dt. geol. Ges.* vol. 17: 702–706.

_____ 1865b. Die Fauna der unter-oligocänen Tertiärschichten von Helmstädt bei Braunschweig. *Z. dt. geol. Ges.* vol. 17: 459–534.

LAMBRECHT, K., 1933. *Handbuch der Palaeornithologie*, Verlag von Gebrüder Borntraeger, Berlin.

LYDEKKER, R., 1891. *Catalogue of the Fossil Birds in the British Museum (Natural History)*, British Museum, London.

McMURRICH, J.P., 1889. On the occurrence of an *Edwardsia* stage in the free swimming embryos of a Hexactinian. *Johns Hopk. Univ. Circ.* vol. 8: 31.

NEAVE, S.A., 1939a. Nomenclator Zoologicus, vol. 2 (D–L). Zoological Society of London, London.

_____ 1939b. Nomenclator Zoologicus, vol. 1 (A–C). Zoological Society of London, London.

_____ 1940. Nomenclator Zoologicus, vol. 3 (M–P). Zoological Society of London, London.

NEUMOEGEN, B., 1880. Description of a new genus and species of Zygaenidae. *Can. Ent.* vol. 12: 67–69.

[QUATREFAGES, A. de], 1841. Zoologie: Côtes de la Manche, *Institut* vol. 9: 427.

QUATREFAGES, A. de, 1842. Mémoire sur les Edwardsies (*Edwardsia*, Nob.) nouveau genre de la famille des Actinies. *Annls Sci. nat. (2nd series Zool.)* vol. 18: 65–109.

REICHENBACH, -., 1866. In Wright (1866).

RIEMANN-ZÜRNECK, K., 1976. A new type of larval development in the Actiniaria: giant larvae. Morphological and ecological aspects of larval development in *Actinostola spetsbergensis*. In G.O. Mackie, ed., *Coelenterate Ecology and Behavior*, Plenum Publ. Corp., New York.

STEPHENSON, T.A., 1928. *The British Sea Anemones*, vol. 1, The Ray Society, London.

THOMPSON, J.V. 1829. On the luminosity of the ocean, with descriptions of some remarkable species of luminous animals, *Pyrosoma* and *Sapphirina. Zoological Researches. Memoir 3:* 37–61.

TOWNSEND, A.C. and ENGLAND, H.W., 1938. The dates of publication of J.W. Tutt's "British Lepidoptera" and "Natural History of British

Butterflies". *J. Soc. Biblphy nat. Hist.* vol. 1: 131–133.
TUTT, J.W., 1907. A Natural History of the British Lepidoptera, vol. 9: 144–192.
———— 1908. A Natural History of the British Lepidoptera, vol. 9: 483.
WRIGHT, E.P., 1866. Coelenterata. *Rec. zool. Lit.* vol. 2: 768–784.

MUSCICAPA RUFICAUDA SWAINSON, 1838 (AVES, MUSCICAPIDAE): PROPOSED DESIGNATION OF NEOTYPE BY USE OF THE PLENARY POWERS. Z.N.(S.) 2270

By C.W. Benson *(Department of Zoology, Cambridge University, England)*

The purpose of this application is to maintain the current usage of *Muscicapa ruficauda* Swainson, 1838, since the holotype on which it is based proves to belong to a species long and universally known as *M. unicolor* (Blyth, 1843), and is very different from that to which the name *M. ruficauda* has been applied for almost a century. If the provisions of the Code were strictly applied, a very confusing result would follow: the name *M. ruficauda* would be transferred to and replace the well known *M. unicolor,* and another name would have to be applied to what is currently universally called *M. ruficauda.* In the interests of stability, it is proposed that Swainson's holotype be suppressed by use of the plenary powers and that a neotype be designated from among specimens catalogued by Sharpe, 1879, who first applied unequivocally the name *ruficauda* in its modern sense.

2. When in 1840 William Swainson (1789-1855) emigrated to New Zealand, his collection of bird skins was disposed of to the University Museum of Zoology, Cambridge, England, wherein it is still extant. In this collection is a specimen marked in Swainson's handwriting "Muscicapa ruficauda Sw. Rufous-tailed Flycatcher. India". It agrees with the description of *Muscicapa ruficauda* Swainson (1838, *The Naturalists' Library, Flycatchers:* 251), particularly in a total length of six inches; white eye-ring; cinereous grey head (i.e., crown, "brighter on the sides", as indeed it is on one side); pale fulvous under tail-coverts, and a relatively stout, "shrike-like", bill. Swainson writes of "this specimen", indicating that he had only the one specimen. No other has been found in his collection. Thus the specimen in Cambridge must be regarded as the holotype. It bears the University Museum catalogue reference 27/Mus/31/pp/1. It agrees with females of the species known as *M. unicolor* (Blyth) (males are differently coloured).

3. The Swainson specimen apart, all the specimens referred to hereafter are in the British Museum (Natural History). It has been compared with 38 adult females of *Muscicapa unicolor unicolor* (Blyth, 1843, *J. Asiat. Soc. Bengal,* vol. 12: 1007), of the Himalayas and Burma east to Laos, and four of *M. u. harterti* (Robinson

& Kinnear, 1928, *Novit. Zool.*, vol. 34: 255), of south-east Asia, from Thailand to Sumatra, Java and Borneo. There is considerable individual variation in the female of *M. unicolor*, some specimens (regardless of the subspecies) having the crown olive-brown uniform with the mantle, others the crown grey with the mantle more olivaceous. The Swainson specimen is of this latter type, agreeing in colour particularly well with the following:– no. 86.4.1.3688, Manipur, India, 26 April 1881; 1948.80.540, Mogok, Katha District, Burma, 29 January 1934; 1936.4.12.2171, Gunong Tahau, Pahang, Malay Peninsula, 4 June 1905.

4. The following measurements in millimetres are from a sample of material of *M. ruficauda* and *M. unicolor* (both in the modern sense of Ali & Ripley, 1972, *Handbook of the birds of India and Pakistan*, vol. 7: 150, 389):

	Wing	Tail	Bill (from skull)
		M. ruficauda	
10 males	75 – 80 (77.7)	54 – 60 (57.4)	15 – 16.5 (15.8)
10 females	73 – 81 (75.5)	53 – 60 (55.9)	14.5 – 16 (15.4)
		M. u. unicolor	
10 males	79 – 85 (82.2)	67 – 75 (70.3)	17 – 18.5 (17.8)
10 females	79 – 85 (81.3)	68 – 72 (69.7)	16 – 18 (17.0)
		M. u. harterti	
10 males	75 – 81 (79.1)	58 – 66 (62.0)	16 – 18 (16.9)
4 females	75, 76, 77, 79	54, 58, 60, 61	16.5, 17, 17, 18

5. *M. u. unicolor* is larger in all three measurements than *ruficauda* (modern sense), whereas in *harterti* the difference is only marked in bill-length. The Swainson specimen has wing 73, tail 54, bill 18 mm., figures which seem to agree best with female *harterti*. However, the tips of the outer primaries of the Swainson specimen have been broken off, while the bases of the central tail-feathers are in sheath, indicating moult. Thus both the wing and tail figures are artificially short. The bill-length is much longer than for any *ruficauda* (modern sense).

6. In general colour the Swainson specimen agrees with the adult female of the species *unicolor* (the adult male of which is very different, wholly blue above, predominantly so below), not with what is currently called *ruficauda* (in which the sexes are alike). Especially striking is the difference in tone of the rufous on the tail and its coverts, much darker in both races of *unicolor;* the darker underparts in *unicolor*, with much less white on the abdomen, and the under tail-coverts pale fulvous instead of plain white; and the

bill as a whole nearer black than sepia in *unicolor,* with only some tendency to whitish on the keel of the mandible, whereas in *ruficauda* the maxilla is sepia, the mandible as a whole whitish. In *unicolor,* too, the tarsus and feet are more robust. There cannot be any doubt whatever but that the Swainson specimen belongs with the species currently known as *M. unicolor,* not with that known as *M. ruficauda.* It has also been compared by D. Goodwin, of the British Museum (Natural History), and R. Wagstaffe, ex-Curator of Vertebrates, Merseyside County Museums, Liverpool, who both agree fully with this determination.

7. The next problem is to establish the first author who used the name *ruficauda* in the generally accepted modern sense. Blyth (1847, *J. Asiat. Soc. Bengal,* vol. 16: 120) describes *Butalis ruficauda* (Swainson), commencing "The beak of this species more resembles that of *B. grisola,* but is longer". Above on the same page he refers to "the European *Muscicapa grisola*", meaning what is currently called *Muscicapa striata* (Pallas, 1764), of which *Muscicapa grisola* Linnaeus, 1766, is a synonym (then in general use). However, it is at once apparent that the bill of *ruficauda* (modern sense) is not longer, but shorter, than that of *striata.* On the other hand the bill of *unicolor* is about the same length as in *striata.* This is borne out by Vaurie (1953, *Bull. Amer. Mus. Nat. Hist.,* vol. 100 (4): 511, 523), who gives the average length of bill as 17.0 for *unicolor,* 17.1 for *striata* and 15.7 for *ruficauda.* Thus Blyth was dealing with *ruficauda* Swainson (original sense), not with *ruficauda* (modern sense). Further support for this derives from his reference to the under tail-coverts being faintly tinged with "ferruginous" and to the "under mandible" with "little trace of whitish". Jerdon (1877, *The birds of India,* vol. 1: 468, as *Cyornis ruficauda,* Swains.) gives the same description of the under tail-coverts as does Blyth, and refers to the bill as "dusky". If Jerdon had been dealing with *ruficauda* (modern sense) he would surely have referred to the whitish mandible, contrasting with the dark maxilla. The description by Godwin-Austen (1870, *J. Asiat. Soc. Bengal,* vol. 39: 268), using the same name as Jerdon, is so flimsy that it is impossible to decide to which species he is referring. Gray (1869, *Hand-list of genera and species of birds:* 325, as *Niltava ruficauda,* Sw.) gives no description at all. Nor do any of the following, using the same combination as Jerdon: Brooks (1875, *Stray Feathers,* vol. 3: 235), Fairbairn (1876, *ibid.,* vol. 4: 257), Hume (1876, *ibid.,* vol. 4: 396), Butler (1877, *ibid.,* vol. 5: 228), Brooks (1877, *ibid.,* vol. 5: 470). In the last reference there is a comment "Dr. Jerdon was doubtful about *Cyornis ruficauda* being a good species, and he suspected the male to be blue". Brooks himself found the sexes to be alike in colour, so that he must have been considering *ruficauda* (modern

sense), although Jerdon seems to have had in mind *ruficauda* in the Swainson sense (i.e. modern *unicolor*). In the original description of *Cyornis unicolor*, Blyth (1843, *J. Asiat. Soc. Bengal*, vol. 12: 1007) had available only a blue male, still retaining "many of its mottled nestling feathers". Blyth (1847, *ibid.*, vol. 16: 128) only had an adult male; likewise Jerdon (1877, *The birds of India*, vol. 1: 465).

8. It must be concluded that the first unequivocal description of *M. ruficauda* in the modern sense is that by Sharpe (1879, *Catalogue of the birds in the British Museum*, vol. 4: 457, as *Siphia ruficauda*). This prestigious work established the consistent modern usage. The specimens a, b and c on which the description is based are still in the British Museum (Natural History). In colour "a" and "b" (adults) agree with adults of *ruficauda* (modern sense), in lacking sexual colour dimorphism, and are not females of *unicolor* or the similar Swainson specimen. Their measurements (they are not included in the sample in paragraph 4 above) also accord with this determination:–

		Reg. No.	Wing	Tail	Bill (from skull)
				(millimetres)	
a.	Ad. Nellore (Jerdon)	45.1.10.47	73	56	16
b.	Ad. Female Himalayas (Stoliczka)	67.9.24.4	75	55	16
c.	Juv. Himalayas (Stoliczka)	67.9.24.5	75	56	14.5

9. In order to maintain current usage the holotype of *Muscicapa ruficauda* Swainson, 1838, must be set aside and specimen "a" above, from Nellore, should be designated as the neotype.

10. In an Appendix are given citations of use of the names *Muscicapa ruficauda* and *unicolor* respectively in the last fifty years, in accordance with Article 79 (b) of the Code. All uses of *ruficauda* cited are in the Sharpe (not the Swainson) sense. I do not know of any use of that specific name in the Swainson sense (equal to *unicolor*) in the past 100 years. In fact, the most recent use of *ruficauda* in the Swainson sense would appear to be by Jerdon, 1877, as cited in paragraph 7 above. By contrast, in the past 100 years *unicolor* as proposed originally by Blyth (or *harterti* for the south-east Asian subspecies, not recognised until 1928) has been universally used and is in current general use. In this same period, *ruficauda* has been universally employed for a different species, and I am unaware that any other specific name has ever been applied to

it. To revert to the use of *ruficauda* in the original sense of Swainson, 1838, and to adopt it in preference to *Cyornis unicolor* Blyth, 1843, would be contrary to the interest of stability in nomenclature.

11. The International Commission on Zoological Nomenclature is therefore requested:

(1) to use its plenary powers to set aside the holotype of the nominal species *Muscicapa ruficauda* Swainson, 1838, and, having done so, to designate as neotype the female specimen "a" cited by Sharpe, 1879: 457;

(2) to place on the Official List of Specific Names in Zoology:

(a) *ruficauda* Swainson, 1838, as published in the binomen *Muscicapa ruficauda,* with an endorsement that the holotype has been set aside by use of the plenary powers, and that specimen numbered 45.1.10.47 in the British Museum (Natural History) as cited by Sharpe, 1879: 457, has been designated as neotype of that species;

(b) *unicolor* Blyth, 1843, as published in the binomen *Cyornis unicolor.*

12. The foregoing proposals have the support of Professor S. Dillon Ripley, the distinguished student of Indian ornithology. Deep appreciation is also expressed to Dr. E. Eisenmann for his advice in the formulation of this application.

APPENDIX

A list of publications in which the names *Muscicapa ruficauda* and *M. unicolor* respectively have been used in the preceding fifty years:–

(1) *Muscicapa ruficauda* (all in the modern sense)

ALI, S. 1953. *The birds of Travancore and Cochin.* London: Oxford University Press (p. 79, as *Alseonax ruficauda* (Swainson). Rufoustailed Flycatcher).

ALI, S. & RIPLEY, S.D. 1972. *Handbook of the birds of India and Pakistan,* vol. 7. Bombay, London and New York: Oxford University Press (p. 150, as *Muscicapa ruficauda* Swainson, Rufoustailed Flycatcher).

BAKER, E.C.S. 1930. *The fauna of British India. Birds,* vol. 7. London: Secretary of State for India (p. 138, as *Alseonax ruficaudus* Swainson).

BATES, R.S.P. & LOWTHER, E.H.N. 1952. *Breeding birds of Kashmir.* London: Oxford University Press (p. 107, as *Alseonax ruficaudus* (Swainson), Rufoustailed Flycatcher).

EDWARDS, E.E. 1974. *A coded list of birds of the world.* Sweet Briar, Virginia: author (p. 127, as *Muscicapa ruficauda,* Rufoustailed Flycatcher).

MORONY, J.J., BOCK, W.J. & FARRAND, J. 1975. *Reference list of the birds of the world.* New York: American Museum of Natural History (p. 109, as *Muscicapa ruficauda*).

RIPLEY, S.D. 1961. *A synopsis of the birds of India and Pakistan.* Bombay: Bombay Natural History Society (p. 422, as *Muscicapa ruficauda* Swainson, Rufoustailed Flycatcher).

VAURIE, C. 1953. A generic revision of flycatchers of the tribe Muscicapini. *Bulletin of the American Museum of Natural History,* vol. 100 (4): 453–538 (p. 521, as *Muscicapa ruficauda* Swainson).

VAURIE, C. 1959. *The birds of the palearctic fauna. Passeriformes.* London: H.F. & G. Witherby (p. 332, as *Muscicapa ruficauda* Swainson, Rufous-tailed Flycatcher).

VOOUS, K.H. 1977. List of recent holarctic bird species. Passerines (part 1). *Ibis* vol. 119 (2): 223–250 (p. 246, as *Muscicapa ruficauda* Swainson, Rufous-tailed Flycatcher).

WHISTLER, H. 1933. The Vernay scientific survey of the Eastern Ghats (ornithological section). *Journal of the Bombay Natural History Society,* vol. 36 (1): 67–93 (p. 86, as *Alseonax ruficauda* (Swainson)).

Prior to 1928, the name *ruficauda* was also used by:–

HARTERT, E. 1910. *Die vögel der paläarktischen fauna* 1. Berlin: Friedlander and Son (p. 485, as *Muscicapa ruficauda* Swainson).

OATES, E.W. 1890. *The fauna of British India. Birds* 2. London: Secretary of State for India (p. 36, as *Alseonax ruficaudus,* Rufous-tailed Flycatcher).

Although, as below, Gruson (1976) lists *M. unicolor,* he excludes *ruficauda,* evidently an inadvertent omission.

(2) *Muscicapa unicolor*

ALI, S. & RIPLEY, S.D. 1972. *Handbook of the birds of India and Pakistan,* vol. 7. Bombay, London and New York: Oxford University Press (p. 189, as *Muscicapa unicolor unicolor* (Blyth), Pale Blue Flycatcher).

BAKER, E.C.S. 1930. *The fauna of British India. Birds,* vol. 7. London: Secretary of State for India (p. 134, as *Muscicapula unicolor* Blyth).

CHASEN, F.N. 1939. *The birds of the Malay Peninsula* 4. London: H.F. & G. Witherby (p. 124, as *Cyornis unicolor harterti,* Malaysian Pale Blue Flycatcher).

DEIGNAN, H.G. 1963. Check-list of the birds of Thailand. *Bulletin of the Unites States National Museum* 226: 263 pp. (p. 189, as *Muscicapa unicolor unicolor* (Blyth) and *Muscicapa unicolor harterti* (Robinson and Kinnear)).

DELACOUR, J. 1947. *Birds of Malaysia.* New York: Macmillan (p. 288, as *Muscicapa unicolor,* Pale Blue Flycatcher).

EDWARDS, E.E. 1974. *A coded list of birds of the world.* Sweet Briar, Virginia: author (p. 126, as *Muscicapa unicolor,* Pale Blue Flycatcher).

GIBSON-HILL, C.A. 1949. An annotated checklist of the birds of Malaya. *Bulletin of the Raffles Museum* 20: 299 pp. (p. 212, as *Muscicapa unicolor infuscata* (Hartert), Pale Blue Flycatcher).

GLENISTER, A.G. 1951. *The birds of the Malay Peninsula, Singapore and Penang.* London, New York and Toronto: Oxford University Press (p. 223, as *Muscicapa unicolor infuscata,* Pale Blue Flycatcher).

GRUSON, E.S. 1976. *Checklist of the birds of the world.* London: Collins (p. 132, as *Niltava unicolor,* Pale Niltava).

KING, B.F., DICKINSON, E.C. & WOODCOCK, M.W. 1975. *A field guide to the birds of South-East Asia.* London: Collins (p. 390, as *Cyornis unicolor,* Pale Blue Flycatcher).

MEDWAY, Lord & WELLS, D.R. 1976. *The birds of the Malay Peninsula* 5. London: H.F. & G. Witherby (p. 349, as *Cyornis unicolor* (Blyth), Pale Blue Flycatcher).

MORONY, J.J., BOCK, W.J. & FARRAND, J. 1975. *Reference list of the birds of the world.* New York: American Museum of Natural History (p. 109, as *Niltava unicolor*).

RIPLEY, S.D. 1961. *A synopsis of the birds of India and Pakistan.* Bombay: Bombay Natural History Society (p. 431, as *Muscicapa unicolor* (Blyth), Pale Blue Flycatcher).

ROBINSON, H.C. 1928. *The birds of the Malay Peninsula* 2. London: H.F. & G. Witherby (p. 135, as *Cyornis unicolor harterti,* Malaysian Pale Blue Flycatcher).

SMYTHIES, B.E. 1953. *The birds of Burma* (2nd edit). Edinburgh and London: Oliver and Boyd (p. 145, as *Muscicapa unicolor* Blyth, Pale Blue Flycatcher).

VAURIE, C. 1953. A generic revision of flycatchers of the tribe Muscicapini. *Bulletin of the American Museum of Natural History* vol. 100 (4): 453–538 (p. 510, as *Niltava unicolor* Blyth).

Prior to 1928, the name *unicolor* was also used by:–

OATES, E.W. 1890. *The fauna of India. Birds* 2. London: Secretary of State for India (p. 22, as *Cyornis unicolor,* Pale Blue Flycatcher).

PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE A TYPE SPECIES FOR *POLYNOE* SAVIGNY, 1818 (ANNELIDA: POLYCHAETA). Z.N.(S.) 2288

By A.I. Muir *(Department of Zoology, British Museum, (Natural History), London UK).*

The generic name *Polynoe* was first published by Savigny (1818, p. 308), to include five new species and *Aphrodita squamata* Pallas, 1766.

2. Since 1818, all six originally included species have been removed to other genera (Hartman 1959):

SAVIGNY (1818) NAME	HARTMAN (1959) NAME
Polynoe muricata	*Iphione muricata* (Savigny, 1818)
Polynoe squamata	*Lepidonotus squamatus* (Linnaeus, 1767)
Polynoe floccosa	*Lagisca floccosa* (Savigny, 1818)
Polynoe foliosa	*Alentia gelatinosa* (Sars, 1835)
Polynoe impatiens	*Lepidonotus impatiens* (Savigny, 1818)
Polynoe setosissima	*Harmothoe setosissima* (Savigny, 1820)

3. In the above tabulation there are two mistakes of authorship, in that *L. squamatus* should be credited to (Linnaeus, 1758) and *H. setosissima* should be credited to Savigny, 1818, but these are not the point of the present application.

4. Savigny (1818) did not designate a type species, although he did split the genus into two groups, one consisting of *P. muricata* alone, the other containing the remaining five species.

5. The genus *Polynoe* was next mentioned in print by Savigny, 1822 (p. 20). This publication, although dated 1809, was published in 1822 according to Sherborn (1897) and the British Museum (Natural History) (1913), or in 1820 according to Hartman (1951). In either case this publication post-dates Savigny, 1818. Savigny also produced figures of his *P. muricata* and *P. impatiens* as part of this work, in a volume dated 1817, but as they are only described in this volume as polynoés this is not significant nomenclaturally. The precise description of Savigny's annelid plates is by Audouin, 1826.

6. Savigny, 1822, gives again the six species of Savigny, 1818, with the addition of the new species *Polynoe scolopendrina* Savigny, 1822 on page 25. On page 26 he says in a long foot-note "Je trouve dans les auteurs beaucoup de *polynoé* que je n'ai point vues en

nature et que je ne puis décrire ici. J'indiquerai de préférence les suivantes, qui toutes paraissent appartenir à cette seconde tribu:". He then lists seven species, which have again been removed to other genera (Hartman, 1959).

SAVIGNY (1822) NAME	HARTMAN (1959) NAME
Aphrodita clava Montag.	*Lepidonotus clava* (Montagu, 1808)
Aphrodita punctata Müll.	*Lepidonotus squamatus* (Linnaeus, 1767)
Aphrodita cirrosa Pall.	*Gattyana cirrosa* (Pallas, 1766)
Aprhodita cirrata Oth. Fabr.	*Harmothoe imbricata* (Linnaeus, 1767)
Aphrodita scabra Oth. Fabr.	*Gattyana cirrosa* (Pallas, 1766)
Aphrodita longa Oth. Fabr.	*Pholoe minuta* (Fabricius, 1780)
Aphrodita minuta Oth. Fabr.	*Pholoe minuta* (Fabricius, 1780)

7. There are again several mistakes in this tabulation. *L. squamatus* should be credited to (Linnaeus, 1758). *A. cirrata* was erected by Müller, 1776. Fabricius (1780, p. 313) says that *A. longa* was erected by Müller, 1776, but Müller (1776, p. 218) seems to say that the name came from Fabricius. Again, however, these are not the point of the present application.

8. Hartman (1959, p. 98) gives the type species of the genus *Polynoe* as *P. scolopendrina* Savigny, 1820, perhaps following Bergström (1916, p. 274). This is clearly contra to article 67 h of the Code: "A nominal species that was not included, or that was cited as a species inquirenda or a species incertae sedis when a new nominal genus was established, cannot be validly designated or indicated as the type species of that genus". This 'designation' has, however, been accepted by Day (1967, p. 55) and Fauchald (1977, p. 64).

9. Rigidly applying Article 69 would mean that one of the six species given by Savigny, 1818, must be the type species of the genus *Polynoe*. The first applicable part of Recommendation 69 is 69B (3) (choice by elimination), which points to *P. floccosa* or *P. foliosa* as the type species (*Lepidonotus* was erected by Leach, 1816, *Harmothoe* and *Iphione* by Kinberg, 1855, and *Lagisca* and *Alentia* by Malmgren, 1865).

10. *P. floccosa* has been placed in the genus *Lagisca* Malmgren, 1865. This is a very well known genus among polychaete workers, containing 24 species (*fide* Fauchald, 1977), and to change its name would cause confusion amongst taxonomists and ecologists alike.

11. *P. foliosa* has been synonymised with *P. gelatinosa* Sars,

1835 (Hartman, 1959), which is the type species of *Alentia* Malmgren, 1865. *P. foliosa* predates *P. gelatinosa*, and therefore has priority over it for the purposes of synonymy, and so becomes the valid name for the type species of *Alentia*. The genus *Alentia* contains 3 species (*fide* Fauchald, 1977), and changing its name would probably not be too confusing for taxonomists or ecologists. However, under the Code, the genus *Polynoe* as it is currently used and understood would have to have a new name. The genus comprises *scolopendrina* and 16 other species (*fide* Fauchald, 1977), some of which are very well known and commonly found in ecological surveys throughout the world. It also provides the root of the family-group name POLYNOIDAE Malmgren, 1867. Changing the name of this genus of polychaete worms, and applying the name *Polynoe* to a different genus, would cause great confusion among taxonomists, systematists and marine biologists.

12. I therefore ask the Commission:

(1) to use its plenary powers to set aside all designations of type species hitherto made for *Polynoe* Savigny, 1818, and to designate *Polynoe scolopendrina* Savigny, 1822, as the type species of that genus;

(2) to place the generic name *Polynoe* Savigny, 1818 (gender: feminine), type species, by designation under the plenary powers in (1), *Polynoe scolopendrina* Savigny, 1822, on the Official List of Generic Names in Zoology;

(3) to place the specific name *scolopendrina* Savigny, 1822 (specific name of type species of *Polynoe* Savigny, 1818) on the Official List of Specific Names in Zoology.

REFERENCES

AUDOUIN, V., 1826. Explication sommaire des planches d'annelides de l'Égypte et de la Syrie, publiées par Jules-César Savigny, membre de l'institut; offrant un exposé des caractères naturels des genres, avec la distinction et quelquefois le nom des espèces. In *Description de l'Égypte*. Paris (L'Imprimerie Impériale). Histoire naturelle, vol. 1 (4): 57–76.

BERGSTROM, E. 1916. Die Polynoiden der schwedischen Südpolarexpedition 1901-1903. *Zool. Bidr. Upps.* vol. 4: 269–304.

BRITISH MUSEUM (NATURAL HISTORY). 1913. *Catalogue of the books, manuscripts, maps and drawings in the British Museum (Natural History)*. London, British Museum (Natural History), vol. 4: 1495–1956.

DAY, J.H. 1967. *A monograph on the Polychaeta of southern Africa*. London, British Museum (Natural History), Pt. 1. Errantia: 1–458.

FABRICIUS, O., 1780. *Fauna Groenlandica, systematice sistens, animalia*

Groenlandiae occidentalis hactenus indagata, quoad nomen specificum, triviale, vernaculumque; synonyma auctorum plurium, descriptionem, locum, victum, generationem, mores, usum, capturamque singuli; prout detegendi occasio fuit, maximaque parti secundum proprias observationes. Hafniae et Lipsiae. 452p.

FAUCHALD, K., 1977. The polychaete worms. Definitions and keys to the orders, families and genera. *Nat. Hist. Mus. Los Ang. Cty. Sci. Ser.* vol. 28: 1–190.

HARTMAN, O., 1951. Literature of the polychaetous annelids of the world. Vol. 1. Bibliography. *Los Angeles Cal.* 290 p.

_____ 1959. Catalogue of the polychaetous annelids of the world. Parts 1 and 2. *Occ. Pap. Allan Hancock Fdn*, vol. 23: 1–628.

KINBERG, J.G.H., 1855. Nya slägter och arter af Annelider. *Ofvers. K. Vetensk. Akad. Förh. Stockh.* vol. 12: 381–388.

LEACH, W.E., 1816. Annulosa. In *Supplement to the fourth, fifth and sixth editions of the Encyclopaedia Britannica.* Edinburgh (Constable & Co.) vol. 1 (2): 401–453.

LINNAEUS, C., 1758. *Systema naturae.* 10th edition.

MALMGREN, A.J., 1865. Nordiska Hafs-Annulater. *Ofvers. K. Vetensk. Akad. Förh. Stockh.* vol. 22: 51–110.

_____ 1867. *Annulata Polychaeta Spetsbergiae, Groenlandiae, Islandiae et Scandinaviae hactenus cognita.* Helsingforsia (Frenckelia). 127p.

MÜLLER, O.F., 1776. *Zoologiae Danicae Prodromus seu Animalium Daniae et Norvegiae indigenarum characteres, nomina et synonyma imprimis popularium.* Havniae. 274p.

SAVIGNY, J.C., 1817. In *Description de l'Egypte.* Paris (L'Imprimerie Royale). Histoire naturelle, planches, vol. 2.

_____ 1818. Les annélides. In Lamarck, J.B. de, 1818. *Histoire naturelle des animaux sans vertèbres.* Paris (Deterville and Verdière), vol. 5: 274–374.

_____ 1822. Système des annélides, principalement de celles des côtes de l'Égypte et de la Syrie, offrant les caractères tant distinctifs que naturels des ordres, familles et genres, avec la description des espèces. In *Description de l'Égypte.* Paris (L'Imprimerie Imperiale). Histoire naturelle, vol. 1 (3): 3–128.

SHERBORN, C.D., 1897. On the dates of the natural history portion of Savigny's 'Description de l'Égypte'. *Proc. zool. Soc. Lond.* 1897 (1): 285–288.

RHODESIELLA PLUMIGERA (LOEW, 1860) (INSECTA, DIPTERA). PROPOSED SUPPRESSION BY USE OF THE PLENARY POWERS. Z.N.(S.) 2146

By Curtis W. Sabrosky *(Systematic Entomology Laboratory, U.S.D.A., c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.)*

The purpose of this application is to avoid confusion in the common, predominantly Old World tropical genus *Rhodesiella* Adams, 1905 (synonyms: *Macrostyla* Lioy, 1864, preoccupied; *Meroscinis* de Meijere, 1908). The confusion stems from the close similarity of a noun *plumiger* and an adjective *plumigera*, each a valid name denoting distinct species within *Rhodesiella*.

2. The name *plumiger* was published in the binomen *Chlorops plumiger* Meigen, 1830: 153 for a species from Central Europe. The specific name *plumiger* was clearly used there as a noun in apposition, because Meigen consistently treated *Chlorops* as of feminine gender, as shown by the numerous specific names that he published in combination with it (*nitida, notata, ornata, palposa, anthracina,* etc.).

3. Generic names ending in *-ops* have been variously treated as either masculine or feminine, but a decision of the Congress has ruled that they are to be uniformly treated as masculine (*Bull. zool. Nom.* vol. 31: 81, amendment to Art. 30a(i)(2), 1972). However, even when *Chlorops* is treated as masculine, the epithet *plumiger* must be treated as a noun under a decision that if such a name could be either a noun or an adjective (in this case the masculine form of a *-ger, -gera, -gerum* adjective), it is to be treated as a noun in apposition (*Bull. zool. Nom.* vol. 31: 81, amendment to Art. 30(i), 1972).

4. The name *plumigera* was published as *Oscinis plumigera* Loew, 1860 for a species from South Africa ("Caffraria"). The name *Oscinis* is feminine, and *plumigera* is the proper adjectival form.

5. Under the International Code, at least at present, the names *plumiger* and *plumigera* in the genus *Rhodesiella* are not homonyms, even though they are of the same origin and meaning, because they differ by one letter (Art. 57d) in a way that is neither a difference of termination due solely to gender (Art. 57b(i)) nor a set of variable spellings considered to be homonymous (Art. 58). Perhaps the Code should add differences of this kind (the *-fer* and *-ger* nouns and adjectives) to the list of variable spellings in Article 58.

PURCHASED

6. There is already confusion in the literature of this family. Several European authors (e.g., Macquart, 1835: 599; Zetterstedt, 1848: 2597, 2655; Duda, 1932: 33) changed Meigen's *plumiger* to the feminine adjective *plumigera,* the first two authors in *Oscinis,* the last in *Macrostyla.* I do not regard this change to the feminine gender termination as being an emendation in the meaning of the Code. However, the Code's definition of an emendation as "any demonstrably intentional change" should surely make allowances for the normal operation of the rule that an adjectival species-group name "must agree in gender with the generic name with which it is at any time combined, and its termination must be changed, if necessary" (Art. 30). If *plumigera* of Macquart et al. were interpreted as a true emendation, it would preoccupy Loew's *plumigera* and this application would be unnecessary, but that interpretation seems to me an unwarranted extension of the meaning of emendation.

7. In spite of the use of *plumiger(a)* Meigen and *plumigera* Loew in various combinations, the latter was never replaced, probably because the two were considered to be synonymous. Now that they are considered to be distinct species, I have found that *Rhodesiella divergens* (Malloch, 1931), originally described in *Macrostyla,* is a synonym of *plumigera* Loew and can be used as a replacement name. However, because this synonymy is subjective, I do not believe that the name *divergens* should be added to the Official List, where it might obstruct any future revisionary change.

8. In order to avoid confusion, the International Commission is requested to exercise its plenary powers:

(1) to suppress the name *plumigera* Loew, 1860, as published in the binomen *Oscinis plumigera,* for purposes of both the Law of Priority and the Law of Homonymy; and

(2) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *plumigera* Loew, 1860, as published in the binomen *Oscinis plumigera.*

REFERENCES

DUDA, O. 1932. Chloropidae (in part). [Family] 61: 1–48 (Lfg. 64), *in* Lindner, *Die Fliegen der palaearktischen Region.*

LOEW, H. 1860. Bidrag till kännedomen om Afrikas Diptera. *Öfvers. K. Vetenskaps-Akad. Förh.* vol. 17: 81–97.

MACQUART, J. 1835. *Histoire naturelle des Insectes.* Diptères, vol. 2: 703 pp.

MALLOCH, J.R. 1931. *Exotic Muscaridae* (Diptera). — XXXIV. *Ann. Mag. nat. Hist.* (10) 8: 49–70.

MEIGEN, J.W. 1830. *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insekten,* vol. 6: 401 pp.

ZETTERSTEDT, J.W. 1848. *Diptera Scandinaviae* vol. 7: 2581–2934.

Readers of the Bulletin are reminded that the only regular source of income to finance the work of the Commission comes from sales of this periodical, and that this is insufficient to meet the needs of zoologists for the services provided by the Commission and to maintain the office at an efficient level. Help in the form of donations and bequests will, therefore, be received with gratitude.

The International Trust for Zoological Nomenclature wishes to express its appreciation of the facilities provided by the Trustees of the British Museum (Natural History) for the Secretariat of the Commission.

© 1979 THE INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
Printed in England by INPRINT OF LUTON (Designers & Printers) LTD.

Volume 36, Part 4
pp. 193 - 269 T.P., I-VI

ISSN 0007 - 5167
18th February 1980

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

CONTENTS

Page

Notices prescribed by the International Congress of Zoology:
1. Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the *Bulletin of Zoological Nomenclature* 193
2. Notice of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases 193
3. List of new applications 194

Special Announcements 195

(Contents continued on page xv)

LONDON

International Trust for Zoological Nomenclature
c/o British Museum (Natural History)
Cromwell Road, London, SW7 5BD

Price £6.25

(All rights reserved)

LIBRARY

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

A. The Officers of the Commission

President: Dr. C.W. SABROSKY *(Systematic Entomology Lab., USDA c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.).*

Vice-President: Prof. Per BRINCK *(Ecology Building, University of Lund, S-223 62, Lund, Sweden).*

Secretary: Mr. R.V. MELVILLE *(British Museum (Natural History), Cromwell Road, London SW7 5BD).*

Assistant Secretary: Dr. I.W.B. NYE *(British Museum (Natural History), Cromwell Road, London SW7 5BD).*

B. The Members of the Commission

(Arranged in order of election or of most recent re-election)

Prof. T. HABE *(National Science Museum, 3-23-1 Hyakunin-cho, Shinjuku-ku, Tokyo 160, Japan)* (20 February 1972) **Marine Biology**

Mr. David HEPPELL *(Department of Natural History, Royal Scottish Museum, Edinburgh EH1 1JF, Scotland)* (20 February 1972) *(Councillor)* **Mollusca**

Dr. I.W.B. NYE *(British Museum (Natural History), Cromwell Road, London SW7 5BD)* (20 February 1972) *(Assistant Secretary)* **Lepidoptera**

Prof. A. WILLINK *(Universidad Nacional de Tucumán, Instituto Miguel Lillo, Miguel Lillo 205, 4000 Tucumán, Argentina)* (20 February 1972) **Neotropical Hymenoptera**

Prof. Enrico TORTONESE *(Istituto Zooprofilattico, Lungo Bisagno Dalmazia 45A, 16141, Genova, Italy)* (30 September, 1972) **Pisces; Echinodermata**

Prof. Per BRINCK *(Ecology Building, University of Lund, S-223 62, Lund, Sweden)* (30 September 1972) *(Vice-President)* **Arthropoda; Ecology**

Prof. Dr. Raphael ALVARADO *(Departamento de Zoologia, Facultad de Ciencias, Universidad de Madrid, Madrid 3, Spain)* (30 September 1972) **Echinoidea; Asteroidea**

Prof. E. BINDER *(Muséum d'Histoire Naturelle, CH 1211 Geneva 6, Switzerland)* (30 September 1972) **Mollusca**

Prof. Harold E. VOKES *(University of Tulane, Department of Geology, New Orleans, Louisiana 70118, U.S.A.)* (30 September 1972) **Mollusca**

Dr. L.B. HOLTHUIS *(Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands)* (30 September 1972) *(Councillor)* **Crustacea**

Dr. G. BERNARDI *(Muséum National d'Histoire Naturelle, 45 bis rue de Buffon, 75005, Paris, France)* (30 September 1972) **Lepidoptera**

Dr. C. DUPUIS *(Muséum National d'Histoire Naturelle, 57 rue Cuvier, 75231, Paris, Cedex 05 France)* (30 September 1972) **Heteroptera**

Dr. M. MROCZKOWSKI *(Instytut Zoologiczny, Polska Akademia Nauk, ul. Wilcza 64, Warsaw, Poland)* (14 March 1975) **Coleoptera**

Prof. H.E. WELCH *(Department of Zoology, University of Manitoba, Winnipeg, Manitoba, R3T 2N2 Canada)* (17 March 1976) **Nematoda**

Prof. Dr. Otto KRAUS *(Zoologisches Institut und Zoologisches Museum, 2000 Hamburg 13, Germany)* (29 September 1976) **Arachnida, Myriapoda**

Dr. W.D.L. RIDE *(Bureau of Flora and Fauna, Department of Science and the Environment, P.O. Box 449, Woden, A.C.T. 2606, Australia)* (29 September 1976) *(Councillor)* **Mammalia; Recent and Fossil**

Dr. Curtis W. SABROSKY *(Systematic Entomology Lab., USDA c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.)* (29 September 1976) *(President)* **Diptera**

Dr. H.G. COGGER *(Australian Museum, Sydney 2000, N.S.W. Australia)* (29 September 1976) **Reptilia; E D P Methods**

Prof. Dr. Gerhard HAHN *(Fachbereich Geowissenschaften, Universitätsgebiet Lahnberge, 3550 Marburg, BRD)* (27 December 1978) **Palaeontology**

Prof. Dr. O. HALVORSEN *(Institute of Biology and Geology, University of Tromsö, P.O. Box 790, N-9001 Tromsö, Norway)* (27 December 1978) **Parasitology**

Dr. V.A. TRJAPITZIN, *(Zoological Institute, Academy of Sciences, Leningrad B-164, USSR)* (27 December 1978) **Entomology**

Dr. F.M. BAYER *(U.S. National Museum, Washington, D.C. 20560, U.S.A.)* (23 August 1979) **Octocorallia; Systematics**

Prof. John O. CORLISS *(University of Maryland, College Park, Maryland 20742, U.S.A.)* (23 August 1979) **Protozoa; Systematics**

Mr. R.V. MELVILLE *(British Museum (Natural History), Cromwell Road, London SW7 5BD)* (23 August 1979) *(Secretary)* **Palaeontology**

Dr. Y.I. STAROBOGATOV *(Zoological Institute, Academy of Sciences, Leningrad B-164, U.S.S.R.)* (23 August 1979) **Mollusca, Crustacea**

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE

A. The Members of the Trust

Sir Peter E. Kent, F.R.S. *(Chairman)*
Dr. F.G.W. Jones *(Secretary and Managing Director)*
Prof. D. Curry, F.G.S.
Sir Arthur Drew, K.C.B.
Mon. J. Forest
Col. Francis J. Griffin, O.B.E.
Dr. R.H. Hedley
Dr. N.E. Hickin
Dr. L.B. Holthuis
Prof. Dr. O. Kraus
Prof. O.W. Richards, F.R.S.
Sir Eric Smith, F.R.S.
Mr. C.W. Wright, C.B.
Dr. G.F. deWitte

B. The Officers of the Trust

Mr. R.V. Melville, M.Sc. *(Scientific Controller)*
Mr. R.J.A.W. Lever *(Assistant Zoologist)*

CONTENTS
(continued from front cover)

Page

Comments

Pleurocera Rafinesque, 1818: proposed designation of type species (John B. Burch) 196
Linnean species of CARABIDAE (M. Mroczkowski) 197
Elapid snake names (G.L. Underwood & A.F. Stimson; H.M. & R.B. Smith) 198
Dicranodonta Woods, 1899; proposed designation of type species (S.R.A. Kelly) 200
Gnathodus Pander, 1856; proposed designation of type species (F.H.T. Rhodes; Glen K. Merrill; David L. Clark) 201

Commission Minutes and Report

Minutes of special meeting, 15-18 August 1979 203
Minutes of general meeting, 20-24 August 1979 205
Report of Commission to Section on Zoological Nomenclature of Division of Zoology of IUBS, Helsinki 207
Changes in International Code of Zoological Nomenclature adopted by Commission in V.P. (79)1 209
Major changes in Code recommended by special session of Commission to Section on Zoological Nomenclature 211
Matters referred by special session of Commission for discussion by Section on Zoological Nomenclature 221
Minutes of Section on Zoological Nomenclature 222

New and Revived Cases

Ogygiocaris Angelin, 1854, and *Ogygites* Tromelin & Lebesconte, 1876 (Trilobita): proposed conservation (G. Henningsmoen, V. Jaanusson, I.W.B. Nye & C.J. Stubblefield). 226
Cophixalus Boettger, 1892 (Amphibia Salientia): proposed designation of type species (J.I. Menzies, M.J. Tyler & R.G. Zweifel) 231
Bellota Peckham & Peckham, 1892 (Araneae): proposed designation of type species (M.E. Galiano) 236
Simia leucophaea F. Cuvier, 1807 (Mammalia Primates): proposed conservation (C.P. Groves & P.H. Napier) 239
Hesperites Pompeckj, 1895 (Cephalopoda: Ammonoidea): withdrawal of proposal for suppression (Secretary) 240
International Trust for Zoological Nomenclature Financial Report and Accounts for 1978 241
Herrera's formulae are not names. Proposed Direction supplementary to Direction 32 (H.M. & R.B. Smith) 246
Barbus altianalis Boulenger, 1900, and *B. rueppelli* Boulenger, 1902 (Pisces): proposed conservation (G. McG. Reid) 249
Ceutorhynchus Germar, 1824, and *Rhinoncus* Schonherr, 1826 (Insecta Coleoptera): proposed conservation and designation of type species (H. Silfverberg). 252

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 36, part 4 (pp. 193 - 269, T.P., I-VI) 18th February, 1980

NOTICES

(a) *Date of commencement of voting.* In normal circumstances the Commission may start to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the plenary powers.* The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin* (those marked with an asterisk involve the application of Articles 23a-b and 79b):

(1) *Carabus caerulescens* Linnaeus, 1758, *C. cupreus* Linnaeus, 1758, and *Cicindela rupestris* Linnaeus, 1767 (Insecta, Coleoptera); designation of type specimens for. Z.N.(S)1237 (M. Mroczkowski).

(2) BUNGARIDAE Fitzinger, 1826, not to be given priority over ELAPIDAE Boie, 1827 and HYDROPHIIDAE Fitzinger, 1843; URIECHINAE Cope, 1893, not to be given priority over APARALLACTINAE Bourgeois, 1968 (Reptilia, Serpentes). Z.N.(S) 2128 (H.M. & R.B. Smith)

(3) *Ogygiocaris* Angelin, 1854 and *Ogygites* Tromelin & Lebesconte, 1876 (Trilobita); proposed conservation. Z.N.(S)439 (G. Henningsmoen, V. Jaanusson, I.W.B. Nye & C.J. Stubblefield).

(4) *Barbus altianalis* Boulenger, 1900, and *B. rueppellii* Boulenger, 1902 (Pisces); proposed conservation. Z.N.(S)2164 (G. McG. Reid).

(5) *Ceutorhynchus* Germar, 1824 and *Rhinoncus* Schönherr, 1826 (Insecta, Coleoptera); proposed conservation and designation of type species. Z.N.(S)2219 (H. Silfverberg).

(6) *Cophixalus* Boettger, 1892 (Amphibia, Salientia); proposed designation of type species. Z.N.(S)2298 (J.I. Menzies, M.J. Tyler & R.G. Zweifel).

(7) *Bellota* Peckham & Peckham, 1892 (Araneae); proposed designation of type species. Z.N.(S)2294 (M.E. Galiano).

*(8) *Simia leucophaea* F. Cuvier, 1897 (Mammalia, Primates);

proposed further steps to conserve. Z.N.(S)2303 (C.P. Groves & P.H. Napier).

(c) *Receipt of new applications.* The following new applications have been received since the publication of vol. 36(3) on 25 October 1979. Those marked with an asterisk involve the application of Articles 23a-b and 79b.

*(1) *Aphodius rufus* Moll, 1782 (Insecta, Coleoptera); proposed conservation. Z.N.(S)2318 (Z. Stebnicka).

(2) *Astacilla* Cordiner, 1793 (Crustacea, Isopoda); proposed validation. Z.N.(S)2319 (B. Kensley).

*(3) *Aphelinus mytilaspidis* Le Baron, 1870 (Insecta, Hymenoptera); proposed conservation. Z.N.(S)2320 (D. Rosen).

(4) Coleoptera Lamellicornia; names proposed for addition to Official List. Z.N.(S)2321 (B.O. Lund).

*(5) *Buccinum fumosum* Dillwyn, 1817 (Gastropoda); proposed conservation. Z.N.(S)2322 (W.O. Cernohorsky)

(6) *Pachycephalosaurus grangeri* Brown & Schlaikjer, 1943 (Reptilia); proposed conservation. Z.N.(S)2323 (D. Baird).

(7) *Cryptus* Fabricius, 1805 (Insecta, Hymenoptera); proposed conservation. Z.N.(S)2324 (G. van Rossem).

(8) *Conus antiquus* Lamarck, 1810 (Gastropoda); proposed invalidation of neotype on rediscovery of holotype. Z.N.(S)2325 (A.J. Kohn).

(9) *Laomedea* Lamouroux, 1812 (Coelenterata, Hydroida); proposed validation. Z.N.(S)2326. (P.S. Cornelius).

(10) *Acanthopagrus* Peters, 1855 (Pisces); proposed conservation. Z.N.(S)2327 (P.C. Heemstra).

SPECIAL ANNOUNCEMENTS

ELECTIONS MADE BY THE SECTION ON NOMENCLATURE OF THE DIVISION OF ZOOLOGY OF IUBS AT HELSINKI, AUGUST 1979

The following members of the Commission whose terms of service ended at the Helsinki General Assembly were there re-elected by the Section on Zoological Nomenclature:

BAYER, F.M. (USA; Octocorallia, Systematics)
CORLISS, J.O. (USA; Protozoa, Systematics)
MELVILLE, R.V. (UK; Palaeontology) (Secretary)
STAROBOGATOV, Y.I. (USSR; Mollusca, Crustacea)

These elections were reported to and endorsed by the Division of Zoology.

FINANCIAL SUPPORT

The Commission has great pleasure in announcing that the XX General Assembly of IUBS (Helsinki, 1979) decided to give the sum of $10 000 a year for the three years 1980, 1981 and 1982 to enable the Commission's work to continue, and meanwhile to seek a long-term solution to our funding problems. The Commission expresses its thanks to the Officers of the Union and to the Delegations from National Adhering Bodies.

The decision taken at Helsinki supersedes Resolution 5 of the XIX General Assembly (Bangalore, 1976) whereby member nations of IUBS undertook to subscribe to the Commission, on a voluntary basis, annual sums calculated as a fraction of their IUBS dues. That Resolution is now no longer in force. The Commission is grateful to those countries that fulfilled their voluntary obligation under it.

The financial situation nevertheless remains extremely precarious. Any help towards solving the long-term problem would be indeed welcome.

c/o British Museum (Natural History)
Cromwell Road
London SW7 5BD
United Kingdom

R.V. MELVILLE
Secretary, International Commission on Zoological
January 1980

FURTHER COMMENT ON THE PROPOSED DESIGNATION OF A TYPE SPECIES FOR PLEUROCERA RAFINESQUE, 1818 Z.N.(S) 83

(see vol. 33: 105–113; vol. 34: 196–199; vol. 36: 139–146)

By John B. Burch (*Museum of Zoology, University of Michigan, Ann Arbor, Michigan 48109, USA*)

I am writing in support of the proposal to designate the type species of the genus *Pleurocera* Rafinesque as *Pleurocera acuta* Rafinesque, 1831. The use of *Pleurocera* with *P. acuta* as its type species is so deeply entrenched in the literature that to change the concept of the genus now as though *P. verrucosa* were the type species would cause great confusion.

I should point out that all commercially available publications known to me that deal with North American PALUDOMIDAE or PLEUROCERIDAE in any way use *Pleurocera* as though *P. acuta* were its type species. Examples of these follow:

EDMONDSON, W.T. (Ed.) 1959. *Fresh-water biology* (2nd edit.) (molluscs by W.J. CLENCH: 1117–1160), New York, Wiley and Sons

GRASSÉ, P.-P. (Ed.) 1968. *Traité de zoologie*, vol. 5, fasc. 3 (prosobranch taxonomy by FRANC, A.: 236–316)

WARD, H.B. & WHIPPLE, G.C. (Eds) 1918. *Fresh-water biology* (molluscs by Bryant Walker: 957–1020), New York, Wiley and Sons

These are major publications which have been widely distributed and are readily available to the general public. They are used as standard texts and references by scientists and students in diverse fields. Other important references, widely used for snail identification, which also use *Pleurocera* as though *P. acuta* were its type species, are:

BAKER, F.C. 1928. *Bull. Wisconsin geol. and nat. Hist. Surv.* no. 70, xx + 507 pp, 28 pls

EDDY, S. & HODSON, A.C. 1950. *Taxonomic keys to the common animals of the north central states* (molluscs: 27–51). Minneapolis, Burgess Publ. Co. (2nd edit., 1955, 3rd edit., 1961)

GOODRICH, C. 1932. *The Mollusca of Michigan,* Univ. Michigan, 120 pp., 7 pls

LA ROCQUE, A. 1953. *Bull. nat. Mus. Canada,* no. 129, ix + 406 pp

——— 1968. *Bull. geol. Surv. Ohio,* no. 62 (3): xv–xxiv, 357–553, pls 9–14

PARRISH, F.K. 1968. *Keys to water quality indicative organisms.* Fed. Water Pollution Control Admin., U.S. Dept. Interior, iv + 202 pp (molluscs by HEARD, W.H.: G1–26

ROBERTSON, I.C.S. & BLAKESLEE, C.L. 1948. *Bull. Buffalo Soc. nat. Sci.* vol. 19(3), xi + 191 pp., map.

References from the above lists have been used by thousands of invertebrate zoologists, hydrobiologists, paleontologists and students in general.

A search of the non-malacological biological and paleontological literature will show that *Pleurocera* has almost invariably been used as though *P.*

acuta were its type species, and that such references number in their hundreds. I doubt if a single case could be found where *Pleurocera* is used as though *P. verrucosa* were the type species, other than in those very few references already cited in the correspondence regarding this question.

I am in the midst of preparing a manual for the U.S. Environmental Protection Agency on the freshwater snails of North America. Such a manual is not available to freshwater biologists at present, and so this one, whatever its virtues or faults, will become the main standard for identification. It will be well publicised, readily available, and in fact, will be widely distributed free of charge. Preceding the publication of this manual I prepared an outline of the classification of these gastropods (*J. Conchyliol.* 1978, vol. 105: 3–9; *Malacol. Rev.* 1979, vol. 13: 97–100) already referred to in the papers on this case. In all these publications, *Pleurocera* is used as though *P. acuta* were its type species.

COMMENT ON PROPOSALS CONCERNING THE NAMES OF FOUR SPECIES OF CARABIDAE (INSECTA, COLEOPTERA) ESTABLISHED BY LINNAEUS

Z.N.(S) 1237

(see vol. 34: 243–246)

By M. Mroczkowski *(Institute of Zoology, Polish Academy of Sciences, ul. Wilcza 64, Warsaw, Poland)*

I am opposed to the late Professor Lindroth's proposals, for the following reasons:

Proposal 1. Both species, *Pterostichus caerulescens* auctorum and *P. cupreus* auctorum, are very well known and common eurosiberian species. Both are unmistakably identified by all coleopterists. Both names are naturalised by long usage in coleopterology. To replace *P. caerulescens* auctorum by *P. versicolor* (Sturm, 1824) and to synonymise *P. caerulescens* with *P. cupreus* would disrupt stability of nomenclature and cause great confusion. I therefore propose another solution and ask the Commission:

(1) to use its plenary powers

(a) to suppress all designations of type specimens hitherto made for the nominal species *Carabus caerulescens* Linnaeus, 1758 and *C. cupreus* Linnaeus, 1758, and, having done so,

(b) to designate the first specimen mentioned on : 243 of the late Professor Lindroth's proposal as neotype of *C. cupreus* Linnaeus, 1758, and

(c) to designate the type specimen of *Platysma versicolor* Sturm, 1824, as neotype of *Carabus caerulescens* Linnaeus, 1758;

(2) to place the specific names *caerulescens* Linnaeus, 1758 and *cupreus* Linnaeus, 1758, as published in combination with the generic name *Carabus*, on the Official List of Specific Names in Zoology.

Proposal 3. The species *Pterostichus vulgaris* (Linnaeus, 1758) (with *Carabus melanarius* Illiger, 1798 as a synonym) is a very common and well-known eurosiberian species, unmistakably identified by all coleopterists. The name *Pterostichus vulgaris* is well known and is in widespread use. There is no risk of confusing it with *Amara lunicollis* Schiødte, 1837 (= *Carabus vulgaris* Panzer, 1797, *non* Linnaeus, 1758) which belongs to another tribe of carabid beetles. The designation of lectotype for *Carabus vulgaris* Linnaeus, 1758 made by the late Professor Lindroth is a sufficient solution and there is no need for any action by the Commission.

Proposal 4. The species *Bembidion rupestre* auctorum (with *Bembidion bruxellense* Wesmaël, 1835 as a synonym) is a common and well-known european species. The name *B. rupestre* is in current use by all coleopterists and to replace it by *B. bruxellense* would disrupt stability and cause confusion. I therefore propose another solution and ask the Commission:

(1) to use its plenary powers

(a) to suppress all designations of type specimen hitherto made for the nominal species *Cicindela rupestris* Linnaeus, 1767, and, having done so,

(b) to designate the type specimen of *Bembidion bruxellense* Wesmaël, 1835, as neotype of *Cicindela rupestris* Linnaeus, 1767;

(2) to place the specific name *rupestris* Linnaeus, 1767, as published in the binomen *Cicindela rupestris*, on the Official List of Specific Names in Zoology.

COMMENTS ON APPLICATION FOR SUPPRESSION AND VALIDATION OF ELAPID SNAKE NAMES. Z.N.(S) 2128

(see vol. 33: 73–84; vol. 34: 8)

(1) By G.L. Underwood (*City of London Polytechnic*) and A.F. Stimson (*British Museum (Natural History), London, SW7 5BD*)

We are writing to let you know that the request by Smith & Smith for the suppression and validation of names related to the ELAPIDAE has our wholehearted support.

One small point occurs. In 1893 Cope (*Amer. Nat.*: 480) proposed the family-group name URIECHINAE based on *Uriechis* Peters, 1854 (*Monatsber. Akad. Wiss. Berlin*: 623), at that time considered a valid name, but now a subjective synonym of *Aparallactus*. The synonymising of these two genera occurred before 1961, and although the family-group name APARAL-

LACTINAE Bourgeois, 1968 was proposed after 1961 we feel that Article 40 of the Code should apply. Thus APARALLACTINAE should be cited with the date "1968 (1893)."

(2) By Hobart M. Smith and Rozella B. Smith (*University of Colorado, U.S.A.*)

Boulenger (1895, *Ann. Mag. Nat. Hist.* (6) vol. 16: 172) was the first to synonymize *Uriechis* Peters, 1854 with A. Smith's previously overlooked *Aparallactus* of 1849, and all workers since then have agreed with that allocation, although the two nominal genera have different type-species.

In the period between the rejection of *Uriechis* as a junior synonym and the proposal of APARALLACTINAE in 1968, *Aparallactus* was placed either in the BOIGINAE, based on the oriental genus *Boiga* and a much different group, as now understood; or in the COLUBRINAE, a highly composite group, or if strictly interpreted, very different in composition; or in the LYCODONTINAE, a South African group of considerably different character. All these subfamilies pertain to the COLUBRIDAE. Since 1968, Bourgeois' APARALLACTINAE has been recognized by several authors in perhaps a dozen works.

Article 40 does not, as we understand it, apply to the case of APARALLACTINAE versus URIECHINAE – indeed, the case is not clearly covered by the Code. Article 40 provides that the validity of a family-group name and that of the name of its type-genus are to be judged independently of each other in circumstances arising after 1960; but *Uriechis* was rejected as a junior synonym in 1895. Article 40 does not state explicitly that a family-group name based on a generic name rejected before 1961 is invalid, and that inference cannot, therefore, be automatically drawn.

Likewise, although APARALLACTINAE has undoubtedly gained general acceptance, it was not proposed until 1968, so that it is not covered by Article 40a.

Nevertheless, it is clear under the Code that when Mademoiselle Bourgeois decided to propose a new subfamily to contain *Aparallactus*, she would have been quite wrong to have based its name on the invalid generic name *Uriechis*. It therefore seems to us that this is a case in which the Commission could use its plenary powers to rule that URIECHINAE is not to be given priority over APARALLACTINAE when the two are regarded as synonyms. This is, however, a point on which the Commission must be guided by the views of interested zoologists.

There is a further correction to be made to the original proposal. This asks, in paragraph 27(1)(d) for the suppression of the family-group name BUNGAROIDEA Fitzinger, 1826. It is, however, open to any zoologist to regard *Bungarus* Daudin, 1803 (*Mag. Encycl.*, VIII[e] Année, vol. 5, No. 20, ventôse an XI [Feb.–Mar. 1803]: 434) as the type-genus of a family-group taxon in its own right. It should not, however, be allowed to displace either ELAPIDAE or HYDROPHIIDAE. In detail, therefore, we wish:

(1) to replace proposal (1) (d) by the following: 'to rule that the

family-group name BUNGARIDAE Fitzinger, 1826 (as "Bungaroidea") is not to be given priority over ELAPIDAE Boie, 1827, and HYDROPHIIDAE Fitzinger, 1843, or either of them, whenever they are regarded as synonyms;'

(2) to add (1) (e): 'to rule that the family-group name URIECHINAE Cope, 1893, is not to be given priority over APARALLACTINAE Bourgeois, 1968 whenever the two are regarded as synonyms.'

(3) to add to proposals (4) (a) and (b) 'given precedence under the plenary powers in (1) (d) above over BUNGARIDAE Fitzinger, 1826;'

(4) to delete proposal (4) (d) and replace it by '(d) BUNGARIDAE Fitzinger, 1826 (type-genus *Bungarus* Daudin, 1803), ruled under the plenary powers in (1) (d) above not to have priority over ELAPIDAE Boie, 1827, and HYDROPHIIDAE Fitzinger, 1843, or either of them, when they are regarded as synonyms;'

(5) to add to proposal (4): '(e) URIECHINAE Cope, 1893 (type genus *Uriechis* Peters, 1854), ruled under the plenary powers in (1) (e) above not to have priority over APARALLACTINAE Bourgeois, 1968, when the two are regarded as synonyms; (f) APARALLACTINAE Bourgeois, 1968 (type genus *Aparallactus* A. Smith, 1849), ruled under the plenary powers in (1) (e) above to have precedence over URIECHINAE Cope, 1893, whenever the two are regarded as synonyms.'

(6) to delete proposal (5).

These proposals regarding family-group names have consequences at generic and specific levels, as follows:

(7) add to (2): '(g) *Bungarus* Daudin, 1803 (gender, masculine), type species, by subsequent monotypy (Stejneger, 1907, *Bull. U.S. nat. Mus.*, vol. 58: 397) *Bungarus annularis* Daudin, 1803 (in Sonnini's *Suites à Buffon* (Paris, Defart), part 69, *Hist. nat. gén. partic, Rept.*, vol. 5: 265 (= *Pseudoboa fasciata* Schneider, 1801); (h) *Uriechis* Peters, 1854 (gender, masculine), type species, by monotypy, *Uriechis lunulatus* Peters, 1854.'

(8) add to (3): '(g) *fasciata* Schneider, 1801, as published in the binomen *Pseudoboa fasciata (Hist. Amph.* vol. 2: 283) (valid specific name of type species of *Bungarus* Daudin, 1803); (h) *lunulatus* Peters, 1854, as published in the binomen *Uriechis lunulatus* (specific name of type species of *Uriechis* Peters, 1854).'

DICRANODONTA WOODS, 1899 (BIVALVIA, CUCULLAEIDAE): COMMENT ON REQUEST FOR DETERMINATION OF TYPE SPECIES: Z.N.(S). 2227

(see vol. 35: 127–128)

By Simon R.A. Kelly (*Department of Geology, Goldsmiths' College, New Cross, London, SE4 6NW*)

In paragraph 4 I stated that the holotype was figured by Woods (1899) on plate 10, figure 14. This should have read pl. 10, figs. 11a–c. The specimen number is correct.

I hope that the correction of this point will let this application be accepted by the International Commission on Zoological Nomenclature.

COMMENT ON THE PROPOSED DESIGNATION OF A TYPE SPECIES FOR *GNATHODUS* PANDER, 1856 (CONODONTA). Z.N.(S) 2279

see vol. 36: 57–62)

(1) By F.H.T. Rhodes (*President, Cornell University, USA*)

I am writing to support the proposal that the Commission should exercise its plenary powers to set aside all designations of type species hitherto made for the genus *Gnathodus* Pander, 1856, and designate *G. texanus* Roundy as the new type species of the genus.

The reasons that lead Dr Lane and Professor Ziegler to make this proposal are fully and lucidly set out in their paper. I wish to speak specifically to the need for nomenclatural and stratigraphic stability. This is especially important because much of our biostratigraphy in the Lower Carboniferous is based on species of *Gnathodus*. To ascribe all the specimens now placed in these species to another genus, of whatever name, would create taxonomic and stratigraphic confusion. Furthermore, nothing would be gained from this procedure, because the name *G. mosquensis*, in the absence of type material, must be treated as a *nomen dubium*.

The best way to retain the nomenclatural stability that has existed for over 120 years is to accept Lane & Ziegler's proposal, which I believe will receive widespread support from conodont workers.

(2) By Glen K. Merrill (*College of Charleston, South Carolina 29401, USA*)

Designation of a replacement type species for this genus under the plenary powers is long overdue. The original type species, *G. mosquensis*, is a *nomen dubium* according to nearly all specialists working with the group. Lane & Ziegler have accurately outlined the facts of the occurrence and fairly expressed consensus among specialists regarding the inadequacy of the existing situation.

Apart from the biostratigraphic problems that might result from the evaluation by Barskov *et al.*, there is another argument for stabilising the generic concept of *Gnathodus* not mentioned by Lane & Ziegler. Many workers dealing with conodonts from Lower Carboniferous rocks now recognise that the longstanding concept of *Gnathodus* embraces more than a single generic group. Attempts to make meaningful distinctions have been frustrated, how-

ever, by the lack of a realistic objective basis for defining the base stock taxonomically, not necessarily phylogenetically) of the gnathodids. Consequently, most of the proposed new genera have remained manuscript names because they could not be distinguished adequately from *Gnathodus*.

The procedures advocated in the works by Barskov, Kazur, *et al.* would not only produce nomenclatural chaos, but are suspect in terms of fact as well. Although it is not possible to say what *Gnathodus mosquensis* is, it is possible to say what it probably is not. The illustrations in Pander differ in significant respects from representative specimens of *Streptognathodus cancellosus* (or *S. oppletus*) and I seriously doubt the correctness of this comparison. It should be noted that selection of *S. cancellosus* as the synonym of *G. mosquensis* is at best a selection among several species that occur together in a single horizon. Systematics should be based on objective reality, not probability. Furthermore, after more than a century there is more than a small chance of misidentification of the type locality or the type horizon, or both. A relatively slight error in stratigraphic position would add several more species and at least one additional genus to the total of candidates for the original *G. mosquensis*. In summary, there is no way we can ever expect to know what was represented by *G. mosquensis*.

As a replacement, *Gnathodus texanus* is adequate, but not ideal as a type species. Its early publication date (1926) is not a particular advantage (Roundy also described another species in that paper that most modern workers assign to *Gnathodus* although he did not). The most serious drawback to *G. texanus* as a type species is that it can no longer be collected at its type locality. The holotype is extant, however, and additional specimens can be collected at neighbouring localities so its stability is not in jeopardy.

In the strongest possible terms I urge the Commission to use its plenary powers to designate *Gnathodus texanus* Roundy, 1926, as the type species of *Gnathodus* Panzer, 1856.

(3) By David L. Clark (*University of Wisconsin, Madison, Wisconsin 53706, USA*)

The taxonomic problem involved in this case is of concern for workers in the Permian System as well as the Carboniferous. I have discussed it with a number of Permian taxonomists and we agree that the proposal by Lane & Ziegler is a rational plan to follow and should be supported.

[Editor's Note. This application has also been supported by Dr. B.D.E. Chatterton (*University of Alberta*), Professor G.D. Webster (*Washington State University*), Professor R. Burton (*West Texas State University*) and Dr David L. Dunn (*6103 Old Oak Circle, Sugar Land, Texas 77478*), R.V.M.]

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Minutes of special meeting at Stensoffa Ecological Field Station, University of Lund, Sweden, 15-18 August, 1979. Z.N.(G) 182

Present: Dr. C.W. Sabrosky, President, in the chair; Messrs. Alvarado, Bernardi, Brinck, Cogger, Corliss, Heppell, Holthuis, Mroczkowski, Nye, Ride, Welch and the Secretary.

1. Dr. Ride, as President of the Editorial Committee, presented the Committee's interim report to the Commission. He outlined the history of the committee's work since its establishment at Ustaoset, Norway, in 1973 up to the publication of the committee's 6th draft of the third edition of the Code in November 1977. Copies of the 8th draft were laid before the members present.

2. Dr. Ride explained the formal procedures for completing the third edition of the Code. Some proposals for major changes to the second edition had been published for over a year and had been voted on by the Commission (see *Bull. zool. Nom.* vol. 36: 66-67). Others had been published but could not be voted on under Article 16 of the Constitution until a year after their publication and after consideration of comments by zoologists. He proposed that the Commission should ask the Section on Zoological Nomenclature at the Helsinki meeting of IUBS to recommend to the Division of Zoology that the Commission be authorised to write into the Code each of those propositions that received an eventual favourable vote from the Commission. Any proposals rejected by the Commission as a whole in a postal vote would not go forward. However, the Section on Zoological Nomenclature had the right to veto any of those proposals, and if it did so the Commission could not vote on them. In that event, the relevant passage of the second edition would remain in force.

3. The final text of the Code, to be voted on by the Commission, would be presented to the Board of the Division of Zoology for final approval or rejection on 1 August 1980, the same date as the start of the final vote by the Commission. The Board, however, could only accept or reject the Code as a whole – and could reject it only on the ground that it did not represent faithfully what the Section had intended.

4. Meanwhile, the 7th draft of the third edition had been circulated to the Commission and the 8th draft was before the meeting. However, neither the special meeting at Stensoffa, nor the general meeting at Helsinki, nor the Section on Zoological Nomenclature at Helsinki would vote on a definitive text. All those votes would be on the principle involved in each proposal; the final wording would still remain to be decided by the Commission voting on a draft prepared by the Editorial Committee.

5. The fact that the Commission had voted favourably on the proposed changes in the Constitution was reported.

6. The Secretary reported on the current financial position and outlined his policy for the future. He gave his estimate of the situation that the Commission might expect to find at Helsinki. Dr. Ride outlined the problems facing the Commission's resolution on financial support. There was some risk that the Australian delegation's motion on examination of the structure of IUBS might delay implementation of the Commission's resolution, if adopted. Professor Brinck mentioned the possibility of financial support being obtained through the Taxonomy Committee of the European Research Councils and the European Science Foundation.

7. The Commission then turned to the report of the Editorial Committee. This presented four sets of proposals: List A included 14 points on which the Commission had voted in Voting Paper (79) 1. All had received the necessary two-thirds majority support and would be reported to the Section on Zoological Nomenclature at Helsinki for incorporation into the Code. List B presented 30 proposals for major changes in the Code. All had been published in *Bull. zool. Nom.* and were recommended by the committee, but some had not been published long enough for a vote to be taken, while others, though ready for voting, had been deferred for further discussions. List C contained 18 proposals on which the Editorial Committee either made no recommendation, or which they recommended against. List D contained two items: the question of the adoption of the term 'epithet' in the Code, and the possible rationalisation of the use of the term 'nominal taxon' in the Code. These did not involve changing any mandatory part of the Code but would have a profound effect on its presentation.

8. The Commission first reviewed the decisions already voted on and included in List A. It then examined lists B and C together, transferring some proposals from one list to the other. The revised List B was adopted for presentation to the General Meeting of the Commission at Helsinki. The proposal in List D on the use of the term 'epithet' was adopted; that concerning the term 'nominal

taxon' was deferred.

The meeting closed with a splendid supper party at which votes of thanks were offered to Professor Brinck for making the excellent accommodation at the Stensoffa Field Station available, and to his staff for the devotion and hard work they had put into the organisation of the meeting. All were agreed that the meeting had taken place in ideal conditions which had allowed much good work to be done.

Minutes of general meeting at Helsinki, Finland 20-24 August, 1979. Z.N.(G) 189

Present: Dr. C.W. Sabrosky, President, in the chair; Messrs. Alvarado, Bernardi, Brinck, Cogger, Corliss, Dupuis, Heppell, Holthuis, Nye, Ride, Welch and the Secretary.

The minutes of the previous general meeting at Bangalore, 1976 (see *Bull. zool. Nom.* vol. 33: 185-188) were confirmed.

The following agenda was adopted:

1. Confirmation of business conducted by the special meeting at Stensoffa/Lund
2. Preparation of slate of nominations for election to the Commission by the Section on Zoological Nomenclature
3. Composition of electoral committee to nominate two candidates for Vice-President
4. Date of election of new Council
5. Any other business

1. The provisional conclusions concerning proposed amendments to the Code reached by the special meeting of the Commission at Stensoffa, near Lund, 15-18 August 1979, were confirmed (they are appended at the end of these minutes).

2. The Commission considered candidates for nomination to the Section on Zoological Nomenclature for election to the Commission. These included five retiring members of the Commission (Eisenmann, Melville, Starobogatov, Bayer and Corliss) whose eligibility for renomination had been agreed by the Council, and three new candidates: Bousfield (Canada; Crustacea and Mollusca); Levine (U.S.A.; parasitic protozoa); Maurin (France; fisheries science). These names were arranged in pairs as follows:

*Starobogatov	:	Bousfield

*Bayer	:	Maurin
*Corliss	:	Levine
*Melville	:	unopposed

(The names marked with an asterisk are those of retiring members of the Commission,)

It was decided not to renominate *Eisenmann since he would reach the age of retirement before the next Congress. It was agreed that one place should be left vacant. The list was forwarded to the Section on Zoological Nomenclature with an indication of the Commission's preference for the names in the left-hand column.

3. Dr. Alvarado and Dr. Cogger were appointed as the ordinary members of the Commission who would join with the Council to form the nominating committee for the new Vice-President.

4. It was agreed that the procedure for electing the Vice-President should be set in motion about 21 August 1980, and that the election of the new Council should follow as soon as possible after the completion of that procedure.

5. At a subsequent session the following matters were considered:

(a) that the question of the use of hyphens in the Code be submitted for a postal vote by the Commission as a whole (it was decided not to proceed to a postal vote);

(b) those members present who were not members of the Editorial Committee were invited to work with the Glossary Committee in testing the definitions given in the Glossary;

(c) that Dr. Welch should prepare a paper on collective-group names with special reference to those that were in use as the names of both collective groups and nominal genera, and to those first proposed expressly as collective-group names;

(d) that Mr. Heppell and Dr. Nye should form a working group on the Official Lists and their titles;

(e) that Mr. Heppell and the Secretary should form a working group on the provisions in the Constitution and Bylaws governing the election of members of the Commission;

(f) that Mr. Heppell should convene a colloquium on zoological nomenclature at the ICSEB II conference at

Vancouver in 1980, and that the Secretary should give advance notice of this to all members of the Commission (it was also agreed that the conclusions of this colloquium would not be binding on the Commission).

Report of the International Commission on Zoological Nomenclature to the Section on Zoological Nomenclature of the Division of Zoology of IUBS at Helsinki, Finland, August 1979 on proposals for major changes in the International Code of Zoological Nomenclature. Z.N.(G) 182

1. *Introduction.* Following the appointment of Dr. Sabrosky to be President of the Commission in 1977, the Editorial Committee to revise the Code was reconstituted with the following membership:–

Dr. W.D.L. Ride (Chairman)
Dr. G. Bernardi
Dr. L.B. Holthuis
Mr. R.V. Melville
Dr. C.W. Sabrosky

Since the last meeting of the Commission (Bangalore, India, October 1976) the Committee has met twice: in London, May 1977; in London, July 1978. Otherwise its business has been conducted by correspondence.

On 1 November 1977, the Secretary of the Commission published a statement of the major changes to the Code that the Committee recommended be considered (*Bull.* vol. 34, pp. 167-173). At the same time the Committee's 6th Draft of the proposed 3rd Edition was published. Comments were sought on the contents of both documents. In October 1978, the Secretary of the Commission published (*Bull.* vol. 35, pp. 77-81) a further statement of changes proposed. (Athough contained in the 6th Draft, these changes had not been itemized in the earlier article by the Secretary.)

In these articles the Committee had attempted to draw attention to all those changes proposed that it considered that the Commission would probably wish to treat as major changes to the Code (i.e. matter that did not merely clarify existing provisions – see Article 87 of the Code). Comments on the proposals, on the Draft generally, and on further proposals made by zoologists, have been published in subsequent parts of the *Bulletin* vols. 34, 35 and 36.

Since the time of completion of the 6th Draft, two further drafts have been completed incorporating the results of the Committee's deliberations on comments to date.

2. *Proposed major changes on which voting is complete.* On 14th March 1979 the Secretary called for a vote of the Commission in V.P.(79)1 on most of the proposed major changes that had become eligible, under the Constitution, to be voted upon. All were adopted by the Commission for recommendation to the Section on Nomenclature. They are listed at A below in general terms (references are also given to the provisions of the current Code that will be amended thereby).

3. *Other major changes recommended by the Committee.* On 29th June 1979 the Chairman of the Editorial Committee took a vote of the Committee on all other proposed major changes that were then under consideration by the Committee. The vote of the Committee was taken to provide a set of recommendations that could be brought to a Special Session of the Commission to provide a basis for discussion.

4. *Meeting of Special Session of the Commission at Lund.* In August 1979 (15th to 18th) the Commission met in Special Session at Lund and considered the proposals that the Committee recommended. It also considered other major changes that the Committee had considered.

5. *Presentation of Proposals to the Commission at Helsinki.* The Special Session recommended two lists of proposals for action by the Commission at Helsinki. List B (below) is recommended for presentation by the Commission to the Section on Nomenclature with the *recommendation* that the proposals in it be adopted for amendment of the 2nd Edition of the Code *subject* to their being individually adopted by a postal vote of the Commission. List C (below) contains proposals that the Special Session recommended against presentation for discussion, but the Special Session does not seek action on them before the next meeting of the Section at IUBS, 1982.

CURTIS W. SABROSKY
President

18 August 1979.

A. **Changes in the Code adopted by the Commission in VP(79)1 for recommendation to the Section on Nomenclature of the Division of Zoology** *(Bull. zool. Nom.* vol. 36: 66-70)

1. That the Glossary will form part of the Code. Currently there is no provision to this effect. It will be incorporated in the Preamble (VP(79)1, Item 1).

2. That, provided the Principle of Binominal Nomenclature applies in the work concerned, and other conditions for availability are satisfied, separate words referring to or representing a single entity be treated as an available compound epithet and written as one word without a hyphen. This provision defines compound epithet and clarifies Articles 11 g (i) and 26 a (VP(79)1, Item 4).

3. That a new generic and a new specific name, proposed together as new after 1930, with a single description serving for both, are not made unavailable solely on the grounds that there are not separate descriptions that are presumed to differentiate or distinguish the taxa. If they satisfy the other provisions of the Code governing availability, such names would both be available. This provision clarifies the status of genus-group and species-group names that could be held to be not available under Article 13 a (i) because they have not been differentiated from one another in a single combined description (VP(79)1, Item 5).

4. That a name for a new genus-group taxon accompanied by a bibliographic reference to an already available epithet shall provide an indication for the new name. This provision extends the meaning of the term "indication" in Article 16 a by expanding Art. 16 (a) (v). A new name proposed after 1930 only by such an indication would not thereby be made available (see, in particular, Art. 16 a (i) and (v)). (VP(79)1, Item 6).

5. That the mandatory provision requiring the insertion of a comma between the name of an author and date, when these are cited with a name, be removed. The decision removes a mandatory provision (Art. 22) regarded as unnecessary. (VP(79)1, Item 7).

6. That the provision (Article 29 d) preventing family-group names proposed before 1961 based upon incorrectly formed stems from being amended, if in general use, be deleted. (VP(79)1, Item 9).

7. That the terms 'correction' and 'mandatory change' be adopted for classes of subsequent spellings. This provision facilitates the structure and arrangement within Articles 32-34. Although included in the voting paper, it could have been treated by the Commission as one of clarification, rather than a major change (see Art. 77 a (iii)). (VP(79)1, Item 10).

8. That when a name of a family-group taxon is found to be invalid as a result of the homonymy of the generic name from which its stem is formed, the family-group name must be replaced by its next most senior synonym, or for want of such a name by a new family-group name derived from the valid name of the former type genus. This provision adds to Article 39. When there is no available, and potentially valid, family-group name the same zoological genus continues to be employed as the basis for the type genus (VP(79)1, Item 13).

9. That the author of a name first published before 1961 as a junior synonym is the person who published it as a synonym even if he attributed it to some other originator. The provision adds to Article 50 to enable authorship to be established. Doubt occurs because such a name becomes available as the result of the action of a *subsequent* author (Article 11 d) rather than through the act of the author who publishes it in synonymy (VP(79)1, Item 14a).

10. That the type series of a species-group taxon whose name was first published as a junior synonym and made available before 1961 is the specimen (or specimens) cited with that name when it was first published as a synonym, or, if none was then cited, the specimen (or specimens) associated with that name before it was published in synonymy. This decision provides a means (hitherto lacking in Articles 72, 73) of determining the types of species-group taxa whose names were made available through Article 11 d. (VP(79)1, Item 14b).

11. That the type species of a genus-group taxon whose name was first published before 1961 as a junior synonym and made available before 1961 is that nominal species (or one of the nominal species if there is more than one) first directly associated with it in a published work. This decision has the same effect for generic names as 10 above has for specific names. (VP(79)1, Item 14b).

12. That a name first proposed as an addition to follow a trinomen is of infrasubspecific rank and, as such, is excluded from

the provisions of the Code. This decision provides a further means, additional to those listed in Article 45 d, for determining infrasubspecific rank. (VP(79)1, Item 15).

13. That the following variant spellings be added to those listed as being deemed identical for purposes of homonymy between species-group names:

    (a) the use of i and j for the same Latin letter,

    (b) the use of u and v for the same Latin letter.

    This decision refers to Article 58 (VP(79)1, Item 16).

14. That the name of a type species is its binomen (or trinomen) in its correct original spelling and original combination; it is to be so cited and not by a senior synonym or in a different combination. The decision causes the replacement of Article 67 e; that Article currently conflicts with the principle that the type of a genus-group taxon is an originally included nominal species-group taxon and that the name of such a taxon is its original binomen or trinomen (VP(79)1, Item 8 – see also Item B25 (below) for completion of the change).

B. **Major changes recommended by the Special Session of the Commission for presentation to the Section to be adopted subject to a subsequent postal vote by the Commission.**

1. To provide that zoological nomenclature applies to the names of fossils of the work of animals or their traces (but not secretions), even though they have not been related to any organism in the animal kingdom that caused them. The term ichnotaxa is used to describe such entities. Article 1 of the Code provides for fossils of the work of animals and it is implicit in that Article that they must be regarded as representing taxonomic units of animals. Since some such fossils have never been related to the organism that have caused them the Code should state explicitly that zoological nomenclature applies to their names (*Bull. zool. Nom.* vol. 36: 11-14).

2. To provide that names given specially to ichnotaxa do not compete in priority at genus-group level with names given to nominal taxa of recognized organisms in the Animal Kingdom and that names given to ichnotaxa at the level of the genus group be treated as the names of collective groups. Names given specially to ichnotaxa would be treated at genus level in the same manner as collective groups and at any level,

notwithstanding Art. 24 b (iii), they must not compete in priority with names given to taxa of the animals that made the work or traces (*Bull. zool. Nom.* vol. 36: 11-14)

3. To provide that zoological nomenclature applies to names given to fossils of fragmentary or detached parts of animals that are classified in artificial taxa as though they were genera and species. The term parataxa is used to describe such entities. At present Article 1 excludes from zoological nomenclature names that are not applied to "taxonomic units of animals known to occur in nature". Since dual nomenclatures exist in practice the matter would be made explicit in the Code (*Bull. zool. Nom.* vol. 36: 11-14).

4. To provide that names given specifically to parataxa do not compete in priority with names given to nominal taxa of recognized organisms in the Animal Kingdom. As in the case of ichnotaxa (2 above), and notwithstanding Art. 24 b (i), the names of parataxa would not compete in priority.

5. To provide that the generic name *Araneus* Clerck and epithets published in combination with it by Clerck in 1757 and made available for use in zoological nomenclature by the International Congress in 1948 (*Bull. zool. Nom.* vol. 4: 315-319) would have priority as though they were published subsequent to the starting point of zoological nomenclature and in 1758 before the 10th Edition of the *Systema Naturae*. The Paris Congress decided to incorporate a provision in the Code to this effect, but the London Congress decided merely to make an entry referring to the work in the Official List of Works approved for use in Zoological Nomenclature (Direction 104, 1959, *Bull. zool. Nom.* vol. 17: 89-91). The relative priority of names in *Aranei svecici* and *Systema Naturae* (10th Edn), and the year from which all names date, would be made explicit in Article 3 of the Code 'Starting Point'.

6. That printing by ink on paper be no longer obligatory among the conditions that constitute publication. The provision that confines publication for the purposes of the Code to works printed only in ink on paper (Article 8(1)) would be removed because by modern technology other methods of printing are now common and, moreover, some of them may only be distinguished with difficulty from works produced by customary techniques. The question is part of the broader issue of what should constitute publication for the purposes of the Code and of the criteria of availability (*Bull. zool. Nom.* vol. 34: 168-169).

7. That the following be listed as methods that do not, if employed, constitute publication (*Bull. zool. Nom.* vol. 34: 168-169):

   (a) handwritten material at any time, and if reproduced as such by a mechanical process after 1930

   (b) photographs as such except microcard and microfiche

   (c) computer print-outs as such

   (d) photocopies as such (e.g., xerography and other indirect electrostatic reproductions) unless such a method is used to reproduce a work that satisfies Article 8

   (e) acoustic tapes and other acoustic recordings as such.

   The provisions relating to publication present particular difficulty, mainly because the existing provisions do not reflect recent advances in printing technology that greatly facilitate the production of numerous identical copies of works that may meet the criteria of publication established in Article 8 of the Code. In an attempt to exercise some control over the quality of works, these methods would be added to those currently listed in Article 9.

8. That a provision be added to the criteria of availability of genus-group names to provide that, notwithstanding the existing provision that establishes subgeneric rank for names proposed for certain primary subdivisions of genera, a uninominal name proposed for a group of species is not made unavailable solely on the grounds that it was proposed for a secondary (or further) subdivision of a genus or subgenus. The present Article was adopted by the London (1958) Congress to meet a particular situation that did appear upsetting to stability. It is implicit in Article 11 f (ii) that names for secondary (and further) divisions of genera are not available. Considering, however, that such names are widespread, and that as they have been generally accepted, their suppression in toto would be even more disturbing, the restriction to primary divisions, even if only implicit, would be deleted. If a uninominal name, duly latinized and capitalized (and not merely a specific epithet), is proposed as a name for a group of species, there is no operational difference between it and a name proposed with the label "gen. nov." and hence no reason to treat it as anything other than a genus-group name even if it was labelled as the name of a "Section" or "Division" (*Bull. zool. Nom.* vol. 35: 78).

9. To require when an indication for a name proposed before 1931 consists of a bibliographic reference to a previously published description, definition or illustration, that the name so indicated must be treated as valid in the work in which both the name and the bibliographic reference occur. Under Article 12 and Article 16 a (i) an author prior to 1931 can make a previously unavailable name, or a newly proposed name, available by publishing with it as an indication a bibliographic reference to a previously published description. Such names would only become available by that action if, in the work in which the name and the reference are published together, the author has employed the name as a valid name. The provision is implicit in Article 1, but that fact can be overlooked.

10. To provide that the status of an unavailable name is not changed by mere citation (in synonymy or otherwise) of the name and a bibliographic reference to the work in which it was published in a manner that did not satisfy the criteria of availability. The Committee *recommends* that this matter be made explicit.

11. That a new generic and a new family name proposed together as new after 1930 with a single description serving for both are not made unavailable solely on the grounds that there are not separate descriptions that are presumed to differentiate or distinguish the taxa. If they satisfy the other provisions of the Code governing availability such names would both be available. Under Article 13a a name proposed after 1930 must, unless a replacement name, be accompanied by a statement that purports to give characters differentiating the taxon or by a bibliographic reference to such a statement. The Commission in VP(79)1 (*Bull. zool. Nom.* vol. 36: 66-70) has voted to make generic and specific names characterised in a single combined description available after 1930 as well as before 1931 (unless they are not available for some other reason). The Committee *recommends* that the action relating to genus-group and species-group names be completed by accepting the same principle for family-group and genus-group names.

12. That an available compound epithet published as separate words based on the name of a place or a saint, one being an abbreviation, shall be amended by writing the abbreviation in full and uniting the parts; in one based on the name of any other person in which one part consists of an initial letter

separated from the rest by a hyphen or stop, the hyphen or stop would be deleted (if one is present) and the parts would be united. Since some compound epithets contain abbreviations, a decision must be made as to the procedure to be followed when uniting the abbreviation within the whole.

13. That adjectival epithets that are, or end in, Greek or words that are not Latin be treated as indeclinable. The requirement in Article 30 of the Code that an adjectival epithet must agree in gender with the generic name with which it is combined causes difficulty with epithets that are not of Latin origin. Epithets that are or end in Greek words, or words that are not Latin, or that are arbitrary combinations of letters, would be treated as indeclinable (*Bull. zool. Nom.* vol. 34: 170).

14. That genus-group names that are nouns of variable gender be treated as masculine irrespective of the gender of the noun from which they are derived and any statement by their authors. Genus-group names that are nouns of variable gender also give great difficulty under Article 30. Alternatives to the Committee's recommendation would be to assign to substantivated adjectives the gender of the noun from which they are derived, or to look to the usage of the original author. All would be treated as masculine (*Bull. zool. Nom.* vol. 35: 168–174).

15. That when an epithet formed from a personal name is a noun in the genitive case it is to be formed according to the rules of Latin grammar if the personal name is treated as a Latin word by the author. When it is not, the genitive is to be formed by adding to the stem of the name *-i* if it is that of a man, *-orum* if of men, or of man (men) and woman (women) together, *-ae* if of a woman, and *-arum* if of women. The old Règles, Art. 14c, provided, for epithets that are substantives in the genitive, that 'the genitive is formed in accordance with the rules of Latin declension in case the name was employed and declined in Latin', but 'if the name is a modern patronymic, the genitive is always formed by adding, to the exact and complete name, an *-i* if the person is a man, . . .' etc. The 1961 Code, Art. 31, appears to say the same thing, but it omits mention of the genitive: 'A species-group name, if a noun formed from a modern personal name, must end in *-i* if the personal name is that of a man, . . .' etc. At the International Congress of Zoology in Washington in 1963, it was held that this Article required too many changes in the

spelling of long-accepted names, and the Article was changed to the Recommendation 31A ('should usually end in . . .') of the present Code. For the sake of promoting consistency in the formation of names the Article would be restored for epithets that are nouns in the genitive case formed from personal names (*Bull. zool. Nom.* vol. 35: 79).

16 That a change in the original spelling of a name shall only be interpreted as 'demonstrably intentional' (and hence be an emendation) when, in the work itself, there is an explicit statement of intention, or when both the original and the changed spelling are cited and the latter is adopted in place of the former, or when two or more names in the same work are treated in a similar way. Information derived from an author's or publisher's corrigenda would be admissible. In order to determine whether a change in the subsequent spelling of a name is an emendation (and hence possibly, technically, an available name in its own right) the Code Article 33 a (ii) requires zoologists to determine whether a change is demonstrably intentional. When the change is only implicitly intentional a rigorous test would be made mandatory (*Bull. zool. Nom.* vol. 35: 80).

17. That a family-group name based on an unjustified emendation of a generic name is an incorrect original spelling and must be corrected. Under Article 40 it is implicit that, when a family name is found after 1960 to be based upon an invalidly emended generic name, the spelling of the family name continues to follow the secondary form of the generic name, while the name of the type genus reverts to its original form. In such cases the spelling of the name of the family group would automatically change in conformity with that of the type genus (*Bull. zool. Nom.* vol. 35: 80).

18. That in the case of scientific names spelled with an umlaut when originally proposed, if there is any doubt that the name is based on a German word, that it be so treated. It is also proposed that any names proposed with umlauts after the publication of the 3rd Edition be treated by deleting the umlaut irrespective of origin. The Code Article 32 c (i) provides that all diacritic marks on letters in scientific names originally published with such marks are to be deleted, with the exception of scientific names based on German words originally spelled with an umlaut, where *ä, ö* and *ü* are replaced by *ae, oe,* and *ue* respectively. Article 27 requires names to be spelled without diacritic marks. It is intended

that the proposed amendment to Article 32 will encourage zoologists forming new names to transliterate according to some preferred system before publishing them (*Bull. zool. Nom.* vol. 34: 170-171).

19. That the use of either of the terms 'variety' or 'form' with a name of the species-group published before 1961 is to be interpreted as denoting subspecific rank unless it is clear from the context of the work in which the name was first published that the author was using the name to denote an infrasubspecific taxon. The status of names treated as subspecific by authors observing the mandatory provisions of Article 45 e (i) of the Code concerning the interpretation of the terms 'variety' and 'form' would be maintained. The Code Article 45 e (i) currently makes it mandatory for names published before 1961 with the terms 'variety' or 'form' to be treated as of subspecific rank. In some groups large numbers of names were used to characterize mere colour variants and their introduction into nomenclature would greatly complicate homonymy without any benefit. The provision permits discretion in the case of such names.

20. That in an epithet formed from the genitive of a personal name the subsequent use of the termination *-i* in place of the termination *-ii* used in the original spelling (and vice versa) constitutes an incorrect subsequent spelling even if clearly deliberate. It is well known that there is divided opinion as to whether such names should be treated as permissible alternatives, or even whether the Code should dictate that only the termination *-i* should be used whatever the stem. Currently the Code Article 32 requires the original spelling to be used. The Committee does not recommend that this be changed. However, some names that are Latin names or that have been put into Latin form and that correctly terminate in *-ii* have been emended by dropping one *i*. Except for purposes of Homonymy (Art. 58(10)) such names may be available where the emendation is deliberate. In order to avoid the seeking out and recording of such variants in synonymies and nomenclators they would be treated as though they were incorrect subsequent spellings and without nomenclatural status (cf. *Bull. zool. Nom.* vol. 34: 171).

21. A generic name that has come to be used as the name of a collective group may continue in that use notwithstanding that the taxon has a type species. The Code Article 11 f (i) provides that names for collective groups are treated as

generic names, and that collective groups require no type-species (Art. 42 c). However, names that have become used for collective groups may be already available names for genera with type species fixed. It is undesirable to require such names to be placed in synonymy with names validly used for other genus-group taxa and removed from the collective groups to which they are applied. While such a name is in use for a collective group, it would be treated as though it has no type.

22. That an epithet may be added in parentheses after the genus-group name, or be inserted in parentheses between the generic name and the specific epithet to represent a group of species; and an additional epithet may be placed in parentheses between the specific and subspecific epithets to represent a group of subspecies within a species; such epithets, which must always be printed with a lower-case initial letter, are not counted in the number of words in a binomen or trinomen. In some parts of the animal kingdom (notably in Lepidoptera) it has been found useful to employ epithets supplementary to a binomen or trinomen to distinguish groups of species and groups of subspecies. The practice would be formalized in the Code, but not to the extent of creating new ranks of species-group taxa (*Bull. zool. Nom.* vol. 36: 71).

23. To provide that a junior secondary homonym replaced before 1961 is permanently invalid unless the Commission rules otherwise. The Code Article 59 b (i) stipulates that if the use of a replacement name for a junior homonym replaced before 1961 is contrary to existing usage, existing usage is to be maintained and the matter referred to the Commission. Discretion would be given to an author as to whether to refer such a matter to the Commission. If the author discovering the situation, or another author, considers that the matter should be referred to the Commission, and does so, existing usage would be maintained under Article 80 until the decision of the Commission is published. In the case of junior secondary homonyms that have not been replaced (even if the homonymy had not been overlooked), but are no longer considered to be in the same genus with the senior homonym, replacement would not take place except by a zoologist who believes that the two species-group taxa are congeneric (Art. 59 c) (*Bull. zool. Nom.* vol. 35: 81).

24. That the type species of a new genus-group taxon cited by an

infrasubspecific name in combination with an available species-group name is the nominal species-group taxon so cited; it is not the infrasubspecific form there named. The Code Article 69 a (i) makes it clear that it was the intention that a nominal species may be designated type of a genus (Article 67 a) by citing its name at any rank in the species group. But the provision is ambiguous and implies that varietal names and the names of 'forms' may be eligible when infrasubspecific. The matter would be placed beyond doubt by a provision that makes it explicit that if an infrasubspecific name is cited 'in combination' with a species-group name, whether cited as a binomen or trinomen, the type species so designated is that nominal species-group taxon denoted by the binomen or trinomen respectively.

25. That a designation of a type species made in contravention of the provision that the name of a type species is the binomen (or trinomen) in its correct original spelling and original combination would be valid but the name of the type species should be correctly cited by subsequent authors. In VP(79)1 (*Bull. zool. Nom.* vol. 36: 66-70) the Commission adopted a recommendation that the name of a type species is the binomen or trinomen in its correct original spelling and original combination (see A14 above). This addition completes the provision.

26. To provide that in extant species of protozoa, when a taxon cannot be differentiated by a single individual, a number of preserved individuals forming, or presumed to form, a clone and presented in a single preparation may be designated as a holotype or neotype, or selected as a lectotype. Such specimens would have the status of such a type (not syntypes). In consequence of full discussion with protozoologists (the International Congresses of Protozoology and Parisitology), provision would be made in Article 73 for a group of individuals to be treated collectively as a name bearer but, unlike syntypes, not further divisible by lectotype selection from among them (*Bull. zool. Nom.* vol. 34: 273).

27. To provide that in extant species of protozoa, when a taxon cannot be differentiated by a single individual (or a single preparation – B26 above), a suite of several preserved preparations of directly related individuals representing different stages in the life cycle may be designated as a holotype or neotype, or selected as a lectotype. Such a group of preparations would have the status of such a type (not

syntypes). The term hapantotype is proposed to describe this category. The change proposed to Article 73 is an extension of that in B26 above. The proposal results from consultation with the same bodies (*Bull. zool. Nom.* vol. 35: 200).

28. That when a species-group taxon is found to be based upon syntypes and was previously wrongly thought to be based upon a single specimen, or when a single specimen is wrongly thought to have been a holotype, that specimen if previously cited in a published work as a holotype shall be deemed to be a lectotype. The Code Article 73 (a) provides that if a nominal species-group taxon is based on one specimen only, that specimen is the holotype, but if more than one specimen provides the basis, those specimens are of equal value in nomenclature (Art. 73 c). The Code makes no provision to protect the status of a name, previously stable because it was thought to be based upon a holotype, that becomes unstable through the discovery that it is based upon syntypes and vulnerable to subsequent selection of a different specimen as lectotype. Stability would be preserved in such cases by giving the specimen previously thought to be a holotype, the status of a lectotype, but protection against selection through mere listing would be provided through making the provisions of Article 73a(iii) apply (*Bull. zool. Nom.* vol. 34: 172).

29. To specify that the designation of a specimen to be a neotype other than in accordance with and under the conditions specified in the Code in the 'cases admitted' (2nd Edn Art. 75 a) is not a valid designation and the specimen so designated not a neotype. The Code Article 75 c lists qualifying conditions and specifies that a neotype is validly designated only when published with certain specified particulars. In addition (Art. 75 a) the Code states that a neotype 'is to be designated only in connection with revisory work, and then only in exceptional circumstances' that are specified, but it is not explicit that a neotype designated under circumstances other than those described in Article 75 a has no status in nomenclature. The proposal provides that neotypes designated in circumstances other than those admitted in the Code are invalid.

30. That the term 'epithet' be adopted for the second word of a binomen and the second and third words of a trinomen. The Special Session has considered the effect upon the Code of adopting the term 'epithet' for the second term of a binomen and the second and third terms of a trinomen. The

expressions 'specific name' (as used in the Code), 'name of a species', 'name of a species-group taxon', and 'name of a nominal species-group taxon' do not mean the same thing. The Code's present usage dates back to the old Règles. The Editorial Committee has adopted the term epithet in its published (6th) Draft. The effect upon comprehensibility produced by the proposal can be judged by inspection and comparison.

C. **Matters referred by the Special Session of the Commission for discussion by the Section on Nomenclature and not forwarded to the Division of Zoology for ratification.**

1. That notwithstanding an academic dissertation (thesis) satisfies the provisions of Article 8 concerning reproduction, nature of issue and obtainability (8(2) (3) (4)), it is not published in the sense of the Code unless it includes a statement that it is issued publicly for permanent scientific record (Article 8).

2. To require as a condition of availability for new names that the author shall have forwarded a copy of the work containing the name and the other conditions that make it available to the Zoological Record (or another specified publication) and for the new name and the bibliographic reference to it to be cited by the Zoological Record (or other specified publication) within a stated number of years (Article 8).

3. That after (say 1980) it be required as a condition of availability for new names and acts affecting nomenclature that they be issued in a work in which the name of the publisher, the date of publication (Chapter V), and the name of the author (Chapter XI) are also printed (Article 8).

4. That the Code also governs names based upon the work of animals irrespective of whether they were published after or before 1930.

5. To include the term 'phenotype' with the terms 'variety' and 'form' as those terms whose use in connection with a name newly proposed after 1960 prevents availability (Articles 15 and 45 e).

6. That as a means of determining whether a subsequent spelling is a justified emendation, to admit information derived from external sources other than an author's or publisher's corrigenda.

7. To provide that when the homonymy of two genus-group names of identical priority is discovered then that *used* for a genus is to take precedence over that used for a subgenus irrespective of the levels at which they were originally established.

8. To remove the requirement that the variant spellings of epithets listed in Article 58 of the Code must be of the same origin and meaning before they may be deemed to be homonyms.

9. To add to the list of variant spellings deemed to be homonyms, genitives based upon personal names that differ in spelling only because of the use of different systems of transliteration.

10. To provide that when a replacement name introduced before 1900 with a type designation different from that of the name it is proposed to replace has become universally employed in the sense of the type so designated, it shall not be a junior synonym of the name it is proposed to replace.

Unconfirmed minutes of the Meeting of the Section on Zoological Nomenclature of the Division of Zoology of IUBS, Helsinki, Finland, 22 August 1979. Z.N.(G) 189

The meeting was called to order by Dr. W.D.L. Ride, Chairman of the preceding meeting of the Section (Bangalore, 1976). The following agenda was adopted:

1. Election of Chairman
2. Minutes of previous meeting
3. Election of members of the Commission
4. Consideration of proposals for changes in the International Code of Zoological Nomenclature
   - (a) presentation of French and English texts of the draft third edition
   - (b) proposals by the Commission on outstanding substantive changes to the second edition
   - (c) proposals by the Commission on other items:
     - (i) names for domestic animals
     - (ii) names of organisms regarded as both plants and animals

(iii) possible standardisation of the use of the term 'nominal taxon' in the Code, or its possible removal

5. Proposed changes in the Constitution of the Commission

6. Proposal to IUBS by the French national delegation concerning different systems of nomenclature

7. Any other business.

1. On the proposition of Dr. Corliss, seconded by Dr.Sabrosky, Dr. W.D.L. Ride was elected Chairman.

2. The minutes of the previous meeting at Bangalore, 1976, were confirmed (see *Bull. zool. Nom.* vol. 33: 188-189).

3. The slate of nominees for election to the Commission prepared by the Commission was presented as follows:

*Starobogatov	:	Bousfield
*Bayer	:	Maurin
*Corliss	:	Levine
*Melville	:	unopposed

(The names marked with an asterisk are those of retiring members of the Commission.)

The Commission expressed a preference for the candidates in the left-hand column, and wished to keep one place vacant. The four candidates recommended by the Commission were duly elected.

4a. The Secretary presented the French and English draft texts of the third edition. The Chairman explained the different principles involved at each of the three stages in amending the Code:

(1) proposals came before the Section from the expert body (the Commission), taking into account any comments by zoologists;

(2) the Commission's proposals could be examined in detail by the Section, which could veto any or all of them;

(3) the Section's recommendations would be placed before the Division of Zoology, which had the duty of ensuring that any proposals for changes in the Code did not misrepresent the intentions of the Section.

Dr. Sabrosky urged that zoologists in the meeting place of IUBS should be informed in advance of the date and place of the Section meeting and be urged to apply to the Board of the Division of Zoology for recognition as members of the Section.

4b. Dr. Sabrosky presented the Commission's report on proposed changes to the second edition of the International Code of Zoological Nomenclature. He explained that these consisted of three lists: List A contained proposals that had already been published over a year (in November 1977) and that had received more than the required two-thirds majority vote in their favour by the Commission. He formally proposed the incorporation of the corresponding changes into the Code *en bloc* and this was *accepted.*

List B contained 30 proposals for changes in the Code that had all been published in *Bull. zool. Nom.*, some for less than a year, so that the Commission could not vote on them. Others had been published for over a year, but had been deferred for further discussion. They had, however, been examined in depth by a special meeting of the Commission immediately before the General Assembly and had been endorsed by a general meeting of the Commission at Helsinki. Dr. Sabrosky said that the Section could veto any of the proposals in which event the Commission could not vote on them and the corresponding provision in the second edition would appear in the third edition of the Code. He proposed that each of the proposals that was not vetoed by the Section should be voted on individually by the Commission and presented to the Board of the Division of Zoology (if adopted by a two-thirds majority vote of the Commission) for final adoption or rejection. The suggested procedure was *accepted.*

List C contained 10 proposals that the special meeting of the Commission had recommended should not be adopted. Each would be submitted for a vote by the Commission, and, if the recommendation of the special meeting was upheld, would not be adopted. These proposals were *received* by the Section and *referred back* to the Commission. They would not be forwarded to the Division of Zoology at Helsinki.

4c(i). Dr. Sabrosky said that the Commission had received a proposal that names given to domestic animals as such should be excluded from the Code. The ensuing debate had not sufficiently clarified the issue and it was proposed to ask the Nomenclature Committee of the International Theriological Congress for advice. This was *agreed.*

4c(ii). Dr. Sabrosky explained the problem presented by

organisms that were considered by some zoologists to be animals and by others to be plants, and that were given different names accordingly, because their nomenclature was regulated by different criteria in the respective codes of zoological and botanical nomenclature. The Section was asked to present a resolution through the Division of Zoology to the General Assembly asking the Executive Committee of IUBS to set up a committee of representatives of all interested divisions to propose means whereby such organisms could have only one correct name, to whichever kingdom they were assigned. This was *agreed*.

4c(iii). Dr. Sabrosky explained that the Commission was not yet ready to present any concrete proposals concerning the use of the term 'nominal taxon' in the Code, but that Dr. Ride and Mr. Melville would try to reconcile their opposed viewpoints and report to the Commission. This was *accepted*.

5. Dr. Sabrosky reported that the changes in the Constitution of the Commission published in *Bull. zool. Nom.* vol. 34: 174-175 had been given the necessary two-thirds majority approval by the Commission (*ibid.* vol. 36: 66-70) and formally moved their adoption by the Section. This was *agreed*.

6. The Section took note of a resolution proposed by the French delegation to the General Assembly that a committee should be set up to establish the differences in principle and approach between the various systems of regulation in biological nomenclature and agreed, with the support of the Commission, that it should be supported in the General Assembly.

7. There was no other business.

R.V. MELVILLE
Secretary
Section on Zoological Nomenclature
Helsinki
25 August 1979

OGYGIOCARIS ANGELIN, 1854, AND *OGYGITES* TROMELIN & LEBESCONTE, 1876 (TRILOBITA): PROPOSED CONSERVATION UNDER THE PLENARY POWERS. Z.N.(S.) 439

By G. Henningsmoen *(Paleontologisk Museum, University of Oslo)*, V. Jaanusson *(Naturhistoriska Riksmuseet, 104 05 Stockholm)*, I.W.B. Nye *(British Museum (Natural History), London SW7 5BD)*, and C.J. Stubblefield *(35 Kent Avenue, Ealing, London W13 8BE)*

The object of this application is to request the suppression of the generic name *Ogygia* Brongniart, 1817 (Trilobita) and the designation of type species for *Ogygiocaris* Angelin, 1854, and *Ogygites* Tromelin & Lebesconte, 1876, in order to conserve their generally accepted usage.

2. Nearly all authors have considered that the generic name *Ogygia*, as used in Trilobites, dates from Brongniart, 1822 (*in* Brongniart, & Desmarest, *Hist. nat. Crust. foss.*: 28). Tromelin & Lebesconte, 1876 (: 633) announced that the name had been used previously for a moth, but gave no further information, and proposed *Ogygites* as a replacement name. Scudder's Index, 1882 (*Bull. U.S. nat. Mus.*, No. 19: 217), indicates that the older homonym is '*Ogygia* Hübner, 1816', and this corresponds to the date given by Zeller in Agassiz's *Nomenclator Zoologicus*, 1846 (Fasc. IX–X, Lepidoptera: 48). These dates were accepted by Raymond, 1913; R. & E. Richter, 1924; Reed, 1930; and Whittard, 1964.

3. Unfortunately, both of these *Ogygia* dates are wrong, as is shown by Neave, 1940. The trilobite name was actually introduced in 1817 by Brongniart (*in* Desmarest, *Nouv. Dict. Hist. nat.*, vol. 8: 516) in one of several articles reporting the progress of Brongniart's work, which were written by a colleague for an important encyclopaedia. Although *Ogygia* Hübner appears in a book (*Verz. bekannt. Schmett.*, signature 15: 225) which bears the date 1816 on its title page, the book was printed and distributed in parts over the course of several years. The history of Hübner's book has been investigated and the dates of issue of its several parts recorded (Hemming, 1937, *Hübner* (Roy. ent. Soc. London) : 511) and the page upon which *Ogygia* appears was published in 1821. It was placed on the Official List of Works Approved as Available for Zoological Nomenclature as Title No. 15 in Opinion 150 and Direction 4.

4. At the time of the original publication of *Ogygia* Brongniart, 1817, only one species, *Ogygia guettardi* Brongniart, was included in the genus, this species being, therefore, the type species

by monotypy. In 1822 (: 28), however, Brongniart added another species, *Ogygia desmaresti.* In 1852 Barrande (*Syst. silur. Centre Bohême,* vol. 1: 655) stated that the type of *Ogygia* was '*Og. Buchi* Brong. (sp.)'. This is the *Asaphus debuchianus* of Brongniart, 1817 (*op. cit.:* 517), later written *debuchii* by Brongniart, 1822 (*op. cit.:* 20) and *Buchii* by Burmeister, 1843 (*Organ. Trilob.:* 555) and by Salter, 1849 (*Fig. Descr. brit. org. Rem.* Decade 2: 1, pl. 6). That species was never included in *Ogygia* by Brongniart and cannot be the type species. The species seems to have been referred to *Ogygia* first by Burmeister, 1843, without explanation, and it was similarly placed by Salter, 1849. Later authors' interpretation of the species was apparently derived principally from Salter's description and illustrations of 1865 (*Mon. brit. Trilob.,* Palaeontogr. Soc.: 125). The definition of *Ogygia* based on this species was generally accepted and the genus came to be distinguished from *Asaphus* by virtue of its non-forked hypostome.

5. The name *Ogygiocaris* was introduced by Angelin, 1854 (*Palaeont. Scand.:* 92) as a substitute for *Ogygia* Brongniart. This is indicated by the fact that he appended 'n.' after the name instead of 'n.g.' which follows all of his names for new genera, and that he listed *Ogygia* as a synonym. Raymond, 1913 (*Ottawa Nat.,* vol. 26(11): 141), stated that Angelin intended to substitute this name for the misidentified *Ogygia* of earlier authors, but not for the true *Ogygia.* There is no direct statement in Angelin's work, however, to support this view. On the contrary, his citation of '*Ogygia* Brongn.' as a synonym suggests that Raymond was mistaken, and that Angelin, like Tromelin & Lebesconte at a later date, believed that *Ogygia* Brongniart was preoccupied. Contrary to Raymond's statement in 1913 (*loc. cit.:* 141), Angelin did not expressly designate *Trilobus dilatatus* Brünnich, 1781 (*Nye Samml. k. danske Skr.,* vol. 1: 393) as type species of *Ogygiocaris,* but merely included that species alone in the genus. As a synonym of *Trilobus dilatatus,* Angelin listed '*Trilobit. de Buchii* var. Brongn.'. This refers to a specimen mentioned by Brongniart in 1822 (*loc. cit.:* 21) at the end of his description of *"Asaphus debuchii".* Perhaps this is evidence that Angelin intended *Ogygiocaris* to replace *Ogygia* of authors rather than of Brongniart as Raymond contended. At least it indicates that his concept of *Ogygiocaris* was the same as the common but mistaken concept of *Ogygia.*

6. Tromelin & Lebesconte, 1876 (*C.R. Assoc. fr. Adv. Sci.* for 1875: 631, 634) noted the significantly different hypostomes of the two species included in *Ogygia* by Brongniart in 1822. Because its hypostome is forked, *O. guettardi* was referred by them to *Asaphus* Brongniart, 1822. These authors (: 633) introduced the name *Ogygites* as an unjustified emendation and a new replacement

name for *Ogygia* Brongniart because the latter was preoccupied. Their intention to provide a new replacement name rather than to propose a new genus is made unmistakably clear by their crediting *Ogygites* to Brongniart, and its treatment as an unjustified emendation by their immediately following explanation. Therefore *Ogygites* and *Ogygiocaris* are both objective synonyms of *Ogygia* Brongniart (*non* Hübner) and both must have the same type species. Confusion was introduced, however, by their acceptance of Barrande's characterisation of *Ogygia* (based on *Asaphus debuchianus*) and by their exclusion of *O. guettardi* from *Ogygites* in spite of the fact that it must be the type species. They included in their new genus *Ogygia desmaresti* Brongniart, *O. desiderata* Barrande, *O. desideratissima* Tromelin sp. nov., and *O. glabrata* Salter.

7. Oehlert, 1903 (*Palaeont. Univ.* (1), vol. 1: 4, 4a) stated (wrongly) that *Ogygia desmaresti* was the type of *Ogygia* because this was the only original species remaining in the genus after the removal of *O. guettardi* – this is true for *Ogygia* 'Brongniart, 1822' but not for *Ogygia* Brongniart, 1817, which is the nominal genus involved. Raymond, 1912 (*Trans. roy. Soc. Canada* (3) vol. 5(4): 115) stated correctly, but without explanations, that the type of *Ogygites* (or *Ogygia*) was *O. guettardi.* Later (1913, *Ottawa Nat.*, vol. 26(11): 141) he assigned *'O. buchii'* to *Ogygiocaris* Angelin. R. & E. Richter, 1924 (*Senckenbergiana*, vol. 6: 232) disagreed with Raymond and followed Oehlert in recognising *O. desmaresti* as type species of *Ogygites.* Thoral, 1946 (*Nouv. Arch. Mus. Hist. nat. Lyon*, No. 1: 89) agreed with Raymond. None of these authors, however, made any mention of Brongniart's publication of *Ogygia* in 1817.

8. Harrington & Leanza, 1957 (*Spec. Publ. Dept. Geol. Univ. Kansas:* 161) proposed *Ogygiocarella* for *'Ogygia buchii* Auctt.' but wrongly stated its type species to be *Asaphus debuchianus* Brongniart, 1822'. This was corrected to *Asaphus debuchii* Brongniart, 1822 by Jaanusson, 1959 (*Treatise invert. Paleontol.* vol. 0: 352, followed by Whittard, 1964 (*Ordovician Trilobites of the Shelve Inlier*, Palaeontogr. Soc.: 256). [Jaanusson, *loc. cit.:* 352 refers to a case pending before the Commission for the suppression of *Asaphus debuchianus* Brongniart, 1817 so as to conserve *A. debuchii* Brongniart *in* Brongniart & Desmarest, 1822, but this application has not yet been published, R.V.M.]

9. The belief that *Ogygia* in trilobites was a junior homonym of *Ogygia* in Lepidoptera, although eventually proved to be erroneous, was held for so long that the name has completely dropped out of use in the former group, so that its revival now would serve no useful purpose. Moreover, it is difficult to say with precision in what sense it could be used if it were revived. The type

specimen of *O. guettardi,* refigured by Oehlert (*loc. cit.*), is distorted; it might belong to a species of *Basilicus* Salter, 1849, though it differs in some morphological respects from the type species, *Asaphus tyrannus* Murchison, 1839. An unused name that would, if re-employed, generate dispute about which name in general use it should replace, is best suppressed.

10. The subfamily name OGYGINAE was published by Raymond, 1913 (*Bull. Victoria Mem. Mus.* No. 1: 41), based on *Ogygia* Brongniart, 1822. It was replaced by Raymond himself in the same year (1913, *in* Eastman-Zittel, Text-book of Paleontology: 718) by OGYGIOCARINAE, corrected to OGYGIOCARIDINAE by Jaanusson, 1959 (*Treatise invert. Paleontol.* vol. 0: 350), and that name is in general use.

11. In the Lepidoptera, NOCTUIDAE, the taxon denoted by the junior homonym *Ogygia* Hübner, [1821], type species *Noctua signifera* [Denis & Schiffermüller], by subsequent designation by Grote, 1895, is nowadays treated as a synonym or as a subgenus of *Ochropleura* Hübner, [1821], type species *Phalaena plecta* Linnaeus, 1761, by subsequent designation by Grote, 1875. *Yigoga* Nye, 1975 (*Generic Names Moths World* vol. 1: 508), was established as a replacement name for *Ogygia* Hübner, and has come into use in publications as a subgeneric name.

12. The International Commission on Zoological Nomenclature is accordingly requested:

(1) to use its plenary powers:

(a) to suppress the generic name *Ogygia* Brongniart, 1817, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(b) to set aside all designations of type species for the two nominal genera named in column (i) below and, having done so, to designate the nominal species named in column (ii) below as their respective type species:

(i)	(ii)
Ogygiocaris Angelin, 1854 (gender: feminine)	*Trilobus dilatatus* Brünnich, 1781
Ogygites Tromelin & Lebesconte, 1876 (gender: masculine)	*Ogygia desmaresti* Brongniart *in* Brongniart & Desmarest, 1822

(2) to place the following generic names on the Official List of Generic Names in Zoology:

(a) *Ogygites* Tromelin & Lebesconte, 1876 (gender: masculine), type species, by designation under the plenary powers in (1)(b) above, *Ogygia desmaresti* Brongniart *in* Brongniart & Desmarest, 1822;

(b) *Ogygiocaris* Angelin, 1854 (gender: feminine), type species, by designation under the plenary powers in (1)(b) above, *Trilobus dilatatus* Brünnich, 1781;

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *desmaresti* Brongniart *in* Brongniart & Desmarest, 1822, as published in the binomen *Ogygia desmaresti* (specific name of type species of *Ogygites* Tromelin & Lebesconte, 1876);

(b) *dilatatus* Brünnich, 1781, as published in the binomen *Trilobus dilatatus* (specific name of type species of *Ogygiocaris* Angelin, 1854);

(4) to place the family-group name OGYGIOCARIDINAE (correction by Jaanusson, 1959, of OGYGIOCARINAE) Raymond, 1913 (type genus *Ogygiocaris* Angelin, 1854) on the Official List of Family-Group Names in Zoology;

(5) to place the following generic names on the Official Index of Rejected and Invalid Names in Zoology:–

(a) *Ogygia* Brongniart, 1817, as suppressed under the plenary powers in (1)(a) above;

(b) *Ogygia* Hübner, [1821], a junior homonym of *Ogygia* Brongniart, 1817.

(6) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology:

(a) OGYGINAE Raymond, 1913 (type genus *Ogygia* Brongniart, 1817) (invalid because the name of its type genus has been suppressed by use of the plenary powers in (1)(a) above);

(b) OGYGIOCARINAE Raymond, 1913 (type genus *Ogygiocaris* Angelin, 1854) (an incorrect original spelling for OGYGIOCARIDINAE).

COPHIXALUS BOETTGER, 1892 (AMPHIBIA, SALIENTIA): PROPOSED DESIGNATION OF TYPE SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 2298

By J.I. Menzies *(Biology Department, National University, Roma, Lesotho)*
M.J. Tyler *(University of Adelaide, South Australia)* and
R.G. Zweifel *(American Museum of Natural History, New York, N.Y. 10024, U.S.A.)*

Cophixalus Boettger (1892) was erected to accommodate *C. geislerorum* Boettger, 1892, a small microhylid frog from "Kaiser-wilhelmsland" (New Guinea) stated to lack procoracoids and clavicles. Although three other specimens, now in the Natural History Museum in Vienna were probably collected at the same time, they were apparently ignored by subsequent authors and the genus remained monotypic when Van Kampen (1923) commented "Probably a renewed examination will show that the species belongs to *Oreophryne* or *Sphenophryne* and the genus *Cophixalus* has to be cancelled."

2. Parker (1934) distinguished *Cophixalus* from other sphenophryine genera (Parker, 1934; Zweifel, 1971) largely by the characters nominated by Boettger (1892). Evidently he did not examine the type specimen of the type species but relied on the original description in formulating his diagnosis, for, in his monograph, Parker listed specimens examined and the type of *geislerorum* was not among them, nor were any other specimens referred to this taxon. Parker also redefined *Oreophryne* Boettger (1895) for another group of Papuan species in which the procoracoids and clavicles are present but reduced to medial portions.

3. The systematic arrangement proposed by Parker, 1934 was widely adopted and numerous new species were described or referred to *Cophixalus* and to *Oreophryne* (e.g. Loveridge, 1948, 1955; Zweifel, 1956, 1962a, 1962b, 1963; Zweifel & Parker, 1969, 1977). There are at least 30 papers employing these generic names and they also appear in herpetofaunal syntheses for the Philippines (Inger, 1954), Sabah (Inger, 1966), New Guinea, (Menzies, 1976) and Australia (Cogger, 1975).

4. The holotype of *C. geislerorum* (Senckenberg Natur-Museum und Forschungsinstitut, Frankfurt, Number 4198) has had most of the pectoral muscles on both sides dissected away, together with any trace of procoracoids or clavicles that might have once existed. Nevertheless, the general resemblance of habitus to frogs of

the genus *Oreophryne* is striking. However, there are three other specimens, previously mentioned, in the Naturhistorisches Museum, Vienna (Numbers 19828.1 – 19828.3) labelled "Type, 1893 New Guinea" by Schlütter which may have been collected at the same time in the same general area as the holotype. Schlutter was an animal dealer in Halle, who distributed specimens collected by the brothers Geisler. We consider the Frankfurt and Vienna specimens conspecific, although there is no evidence that Boettger examined the Vienna specimens in the course of preparing his generic and specific descriptions and so they do not constitute type specimens. Nevertheless the Vienna specimens are significant because dissection reveals the presence of procoracoids and small, curved clavicles diagnostic of *Oreophryne.* We therefore conclude that the original description of *C. geislerorum* erred with respect to the critical nature of the pectoral girdle. Such a mistake is understandable – the clavicles of these frogs are tiny (0.88 x 0.06mm in one specimen) and transparent as is the cartilaginous procoracoid, and so are easily overlooked. Indeed, Boettger (1895) evidently made the same error in describing his genus *Oreophryne* as having "Kein Praecoracoid" but one specimen in the type series of the type species, *O. senckenbergiana,* does have procoracoids and clavicles (the pectoral girdle is missing from the holotype).

5. The discovery that *Cophixalus geislerorum* is most likely improperly associated in its present generic context and probably belongs with the species now placed in *Oreophryne* means that, according to the rules of nomenclature, *Cophixalus* Boettger, 1892, should replace *Oreophryne* Boettger, 1895, and a replacement name be found for *Cophixalus.* We feel that there are cogent reasons for not taking this action, for the confusion that would be caused by the substitution of *Cophixalus* for *Oreophryne* is appalling to contemplate. Forty-four species now considered valid are concerned, most of them inhabiting New Guinea, and all would undergo a change in genus. Moreover, Méhelÿ (1897, 1901) and Loveridge (1948, 1955) both used the same specific patronyms for species now assigned to the two genera and this action would contribute greatly to the confusion: *Oreophryne biroi* (Méhelÿ, 1897) and *Cophixalus biroi* (Méhelÿ, 1901); *Oreophryne parkeri* Loveridge 1955 and *Cophixalus parkeri* Loveridge 1948.

6. We consider that a much less disruptive solution is to have *geislerorum* set aside as the type species of the genus *Cophixalus* and a new type species designated. The next oldest species in the genus is *montanus* (Boettger, 1895). The type specimen, also in Frankfurt, is in poor condition with the skull removed. No specimens additional to the two upon which the original description was based have been reported and better material is not likely to be

readily available, for the type locality is on Halmahera Island in the Moluccas. This would seem, therefore, to be a poor choice as a type species.

7. The next species to be described that are currently referred to *Cophixalus* are *Sphenophryne ateles* and *S. verrucosa,* both described by Boulenger in 1898. The lectotype of *ateles,* in the Museo Civico di Storia Naturale, Genoa, is in poor condition. Apparently none of the specimens in the type series of these minute frogs (the largest is about 15mm long) has been dissected to verify the condition of the pectoral girdle, but a specimen with a high degree of resemblance to the lectotype has been cleared and stained with alizarin and shown to lack clavicles.

8. The lectotype of *C. verrucosus* is also in the Genoa Museum and it too has not been dissected. This is a common, widespread species (records for *ateles* other than the specimens in the type series are in question) and the absence of the clavicle is verified in several alizarin stained specimens. These considerations make *verrucosus* an appropriate species to be designated as the type of the genus.

9. The situation is complicated by doubts as to the exact provenance of *geislerorum* which is stated as "Kaiserwilhelmsland, Neuguinea." The frogs were collected by the brothers Geisler and sent to Schlütter who sold one to the Senckenberg Museum and three to Vienna. During the period in question, the Geislers made an extensive journey, taking in several localities in the eastern part of the Huon Peninsula as well as visiting the site of the present town of Madang (then known as Stephansort) and Kokopo on the Gazelle Peninsula of New Britain (Wichmann, 1912). It is unlikely that the specimens came from New Britain or they would have been so labelled ("Neu Pommern" in those days). Thus although areas from which the type and other specimens came can be fairly well circumscribed, a precise type locality cannot be identified.

10. The question of whether *Cophixalus geislerorum* is a senior synonym of a species of *Oreophryne* presently recognised cannot be answered now. At least two species of *Oreophryne,* morphologically similar to *geislerorum* but with distinct male vocalisation, occur in the general area from which *geislerorum* came. Determination of which, if either, of these is the true *geislerorum* must await additional information and study. In any event, *Oreophryne geislerorum* (Boettger), new combination, will stand as a valid species. The only older names in the genus are for two species in the remote Moluccas.

11. Following from the information and opinions expressed above, we ask the International Commission on Zoological Nomenclature:

(1) to use its plenary powers to set aside all fixations of type species for the nominal genus *Cophixalus* Boettger, 1892, and to designate *Sphenophryne verrucosa* Boulenger, 1898, as type species of that genus;

(2) to place the following generic names on the Official List of Generic Names in Zoology:
   (a) *Cophixalus* Boettger, 1892 (gender: masculine), type species, by designation under the plenary powers in (1) above, *Sphenophryne verrucosa* Boulenger, 1898;
   (b) *Oreophryne* Boettger, 1895, (gender: feminine), type species, by monotypy, *Oreophryne senckenbergiana* Boettger, 1895.

(3) to place the following names on the Official List of Specific Names in Zoology:
   (a) *verrucosa* Boulenger, 1898, as published in the binomen *Sphenophryne verrucosa* (specific name of type of *Cophixalus* Boettger, 1892);
   (b) *moluccensis* Peters & Doria, 1878, as published in the combination *Microhyla achatina* var. *moluccensis* (the currently valid name for the type species of *Oreophryne* Boettger, 1895).

REFERENCES

BOETTGER, O., 1892. *Katalog der Batrachier-Sammlung im Museum der Senckenbergischen Naturforschenden Gesellschaft im Frankfurt-am-Main.* (Knauer, Frankfurt). 73pp.

_____ 1895. Liste der Reptilien und Batrachier der insel Halmaheira nach den Sammlungen Prof. Dr. W. Kukenthal's. *Zool. Anz.*, vol. 18(472): 129–138.

COGGER, H.G., 1975. *Reptiles and Amphibians of Australia.* (A.H. & A.W. Reed, Sydney).

INGER, R.F., 1954. Systematics and zoogeography of Philippines Amphibia. *Fieldiana: Zoology*, vol. 33: 103–151.

_____ 1966. The systematics and zoogeography of the Amphibia of Borneo. *Fieldiana: Zoology*, vol. 52: 1–402.

LOVERIDGE, A., 1948. New Guinean reptiles and amphibians in the Museum of Comparative Zoology and the United States National Museum. *Bull. Mus. comp. Zool. Harvard*, vol. 101: 305–430.

_____ 1955. New frogs of the genera *Asterophrys* and *Oreophryne* from New Guinea. *Breviora*, no. 50: 1–5.

MÉHELY, L. von, 1897. Further contributions to the herpetology of New Guinea. *Termszetr. Fuzetek*, vol. 20: 409–419.

1901. Beiträge zur Kenntnis der Engystomatiden von Neu Guinea. *Termszetr. Fuzetek*, vol. 24: 169–271.

MENZIES, J.I. 1976. *Handbook of common New Guinea frogs.* (Ecology Institute, Wau, Papua New Guinea).

PARKER, H.W., 1934. *Frogs of the family Microhylidae* (British Museum, London).

PETERS, W.H. & DORIA, G., 1878. Catalogo dei rettili e dei batraci raccolti di O. Beccari, L.M. d'Albertis e A.A. Bruijn nella sotto-regione Austro-Malese. *Ann. Mus. civ. Stor. nat. G. Doria*, vol. 13: 323–450.

van KAMPEN, P.N., 1923. *The Amphibia of the Indo-Australian Archipelago.* (Brill, Leiden).

WICHMANN, A., 1912. Entdeckungsgeschichte von Neu Guinea. *Nova Guinea*, vol. 2: 1–369.

ZWEIFEL, R.G., 1956. Results of the Archbold Expeditions. No. 72. Microhylid frogs from New Guinea with descriptions of new species. *Amer. Mus. Novit.* (1766): 1–49.

_____ 1962a. Results of the Archbold Expeditions. No. 83. Frogs of the microhylid genus *Cophixalus* from the mountains of New Guinea. *Amer. Mus. Novit.* (2087): 1–26.

_____ 1962b. A systematic review of the microhylid frogs of Australia. *Amer. Mus. Novit.* (2113): 1–40.

_____ 1963. Results of the Archbold Expeditions. No. 84. New microhylid frogs *(Barygenys* and *Cophixalus)* from the Louisiade Archipelago, New Guinea. *Amer. Mus. Novit.* (2141): 1–10.

_____ 1971. Results of the Archbold Expeditions. No. 96. Relationships and distribution of *Genyophryne thomsoni,* a microhylid frog of New Guinea. *Amer. Mus. Novit.* (2469): 1–13.

_____ & PARKER, F., 1969. A new species of microhylid frog (genus *Cophixalus)* from Australia. *Amer. Mus. Novit.* (2390): 1–10.

_____ & _____ 1977. A new species of frog from Australia (Microhylidae, *Cophixalus*). *Amer. Mus. Novit.* (2614): 1–10.

BELLOTA PECKHAM & PECKHAM, 1892 (ARANEAE; SALTICIDAE) PROPOSED DESIGNATION OF A TYPE SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 2294

By María Elena Galiano *(Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", Av. Angel Gallardo 470, Buenos Aires, Argentina)*

The present case concerns the misidentification of the type species of a genus by the original authors of the generic name, which should be corrected under Articles 67j and 70a. When G.W. Peckham & E.G. Peckham established the new genus *Bellota* (1892: 67) they designated as type species *Chirothecia? formicina* Taczanowski, 1879, in the new combination *Bellota formicina.* They redescribed the species using a male from Venezuela which was sent to them by E. Simon, now kept at the Museum of Comparative Zoology, Harvard. A female of the same lot, identified by the Peckhams as *Bellota formicina,* is now at the Museum National d'Histoire Naturelle, Paris.

2. When the genus *Bellota* was revised (Galiano, 1972), I followed the Peckhams' criteria, but I have since examined many specimens collected near the type locality (Luchugal, Peru) and have identified them as *Chirothecia formicina* Taczanowski, 1879 (: 367–368) by comparison with the holotype (an immature female kept in the Zoological Institute, Academy of Sciences, Warsaw). It is clear that the Peckhams made a mistake when identifying Taczanowski's species. The species from Venezuela which the Peckhams saw was given a new name: *Bellota peckhami* Galiano, 1978 (: 27. See also Peckham & Peckham, 1892: 68; Simon, 1901: 529, 531, 534; Galiano, 1972 (part): 465, 467, 473, 475, figs. 11, 12, 43, 51).

3. Although specifically distinct from *Bellota peckhami* Galiano, 1978, *Chirothecia formicina* Taczanowski, 1879 belongs to the same genus, so should retain its name *Bellota formicina* (Taczanowski, 1879) (*non sensu* Peckham & Peckham, 1892).

4. The misidentification of the type species of *Bellota* having been demonstrated, it is for the Commission to designate a type species, choosing between three possibilities according to the Code, Article 70: (i) the nominal species actually involved, which was wrongly named in the type designation, in this case *Bellota peckhami* Galiano, 1978; or (ii) if the identity of that species is doubtful, a species chosen in conformity with the usage of the generic name prevailing at the time the misidentification is

discovered, but we are not dealing with such a case, because *Bellota peckhami* has been described and illustrated, its holotype can be studied at the Museum of Comparative Zoology, Harvard, and its identity is not in doubt; or (iii) the species named by the designator, regardless of the misidentification, in this case *Chirothecia formicina* Taczanowski, 1879.

5. I have carefully weighed the pros and cons of possibilities (i) and (iii) and consider that the first will best serve the identification and delimitation of the genus *Bellota* Peckham & Peckham, because the authors took the characteristics of their genus from the specimen they had in front of them, namely the holotype of *B. peckhami,* and not from the original material of *C. formicina.*

6. Although the two species have up till now been considered, and still are considered, congeneric, they differ in characteristics that involve some important structures. Further investigations might demonstrate that they are not congeneric. Let us assume that *Chirothecia formicina* is designated as the type species of *Bellota.* Now, supposing that a zoologist (having concluded that the two species are not congeneric) establishes a new genus and designates *Bellota peckhami* as the type species, he would then subjectively associate his new genus with one specimen, viz. the holotype of *Bellota peckhami* on which the Peckhams based their genus *Bellota.* Such a situation might cause great confusion. As the first taxonomic reviser of that genus, I believe that the designation of *Bellota peckhami* Galiano, 1978, as the type species of *Bellota* will contribute to the best comprehension of the genus.

7. The International Commission on Zoological Nomenclature is therefore requested:

(1) to use its plenary powers to set aside all designations of type species for the nominal genus *Bellota* Peckham & Peckham, 1892, hitherto made and to designate *Bellota peckhami* Galiano, 1978 as type species of that genus;

(2) to place the generic name *Bellota* Peckham & Peckham, 1892 (gender: feminine), type species, by designation under the plenary powers in (1) above, *Bellota peckhami* Galiano, 1978, on the Official List of Generic Names in Zoology;

(3) to place the specific name *peckhami* Galiano, 1978, as published in the binomen *Bellota peckhami* (specific name of the type species of *Bellota* Peckham & Peckham, 1892) on the Official List of Specific Names in Zoology;

(4) to place the specific name *formicina* Taczanowski, 1879, as published in the binomen *Chirothecia*

formicina, on the Official List of Specific Names in Zoology.

REFERENCES

GALIANO, M.E. 1972. Salticidae (Araneae) formiciformes. XIII. Revisión del género *Bellota* Peckham, 1892. *Physis*, vol. 31 (83): 463–484.

———— 1978. Fauna desértico-costera peruana. V. Dos especies de Salticidae (Araneae) de Piura. *Rev. peruana Entomol.*, vol. 21 (1): 27–30.

PECKHAM, G.W. & PECKHAM, E.G. 1892. Ant-like spiders of the Family Attidae. *Occas. Pap. nat. Hist. Soc. Wisconsin*, vol. 2: 1–83.

SIMON, E. 1897-1903. *Histoire naturelle des Araignées*, vol. 2: 1–1080.

TACZANOWSKI, L. 1879. Les aranéides du Pérou. *Bull. Soc. imp. Nat. Moscou*, vol. 53 (4): 278–374.

SIMIA LEUCOPHAEA F. CUVIER, 1807 (MAMMALIA: PRIMATES): REQUEST FOR SUPPRESSION UNDER THE PLENARY POWERS OF TWO SENIOR SYNONYMS. Z.N.(S.) 2303

By C.P. Groves *(Department of Prehistory and Anthropology SGS, Australian National University, Canberra, Australia)* and P.H. Napier *(British Museum (Natural History), London)*

In 1968 Groves (*Bull. zool. Nom.* vol. 25: 36) requested the validation under the plenary powers of *Simia leucophaea* F. Cuvier, 1807 (*Ann. Mus. Hist. nat. Paris,* vol. 9: 477, pl. 37) for the drill. This necessitated the suppression of four senior synonyms from Kerr (*The Animal Kingdom,* Mammalia) based on descriptions with vernacular names and a figure in Pennant, 1781 (*Hist. Quadrupeds:* 176–177, pl. 19): *S. Papio sylvicola* for the 'Wood Baboon', *S. Papio variegata* for the 'Yellow Baboon', *S. Papio cinerea* for the 'Cinereous Baboon' and *S. Papio livea* for Pennant's 'no. 81', for which no vernacular name was given. There seems little doubt, however, that all four names apply to the drill.

2. In 1970, in Opinion 935 (*Bull. zool. Nom.* vol. 27: 171), the four specific names mentioned above were suppressed under the plenary powers and placed on the Official Index of Rejected and Invalid Specific Names in Zoology. *Simia leucophaea* F. Cuvier, 1807, was placed on the Official List of Specific Names in Zoology. No member of the Commission voted against the proposal.

3. Two further senior synonyms of *S. leucophaea* have since come to light: *Simia sylvestris* Link, 1795 (*Beyträge Naturges.* vol. 1 (2): 61) and *Simia silvestris* Schreber, [1800], *Saügethiere,* Abt. 5, pl. 8C, no text). The plate in this latter work is almost identical with Pennant's 'Wood Baboon' and clearly depicts the same animal. The date of its publication is not precisely known, but as Sherborn has shown (1892, *Proc. zool. Soc. London:* 590), it must have been before 26 June, 1800 when its appearance was noticed in *Göttinger Anz. gel. Sach.:* 1015–1016, thus certainly antedating F. Cuvier's work. For the sake of nomenclatural stability, it is considered desirable to suppress these two specific names.

4. The International Commission on Zoological Nomenclature is therefore requested:

(1) to use its plenary powers to suppress the following specific names for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) *sylvestris* Link, 1795, as published in the binomen

Simia sylvestris;

(b) *silvestris* Schreber, [1800], as published in the binomen *Simia silvestris;*

(2) to place the two specific names suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Specific Names in Zoology.

HESPERITES POMPECKJ, 1895 (CEPHALOPODA: AMMONOIDEA) WITHDRAWAL OF PROPOSAL FOR SUPPRESSION. Z.N.(S.) 1873

By the Secretary, International Commission on Zoological Nomenclature

In 1969 (*Bull. zool. Nom.* vol. 26: 62–64) Professor D.T. Donovan *(Department of Geology, University College, London)* published a proposal for the suppression of the generic name *Hesperites* Pompeckj, 1895 on the grounds that the only specimen ever referred to the genus probably came from a Lower Jurassic horizon (not a Triassic horizon, as supposed by Pompeckj) and hence the generic name would be a senior synonym of one of several names in current use. He quoted several authorities in support of this view. His application was supported by the late Professor P.C. Sylvester-Bradley, but opposed by Dr Ellis Yochelson *(U.S. Geological Survey).*

On 29 October 1970 the members of the Commission were invited to vote under the Three-Month Rule on voting paper (70)38 for or against Professor Donovan's proposals. At the close of the voting period on 29 January 1971, there were eight votes in favour and five against (one late affirmative and three late negative votes were received; three voting papers were not returned). The majority of votes validly cast was less than a two-thirds majority; under clause C.12 of the Bylaws then in force (*Bull. zool. Nom.* vol. 22: 8) I was called upon to submit the case for a second vote.

Before resubmitting the case, I asked Professor Donovan if he wished to continue with the application. He replied that he would prefer to withdraw it pending further study and asked for the file to be kept open for that purpose. This note merely announces the withdrawal of the original proposal.

FINANCIAL REPORT FOR 1978

The accounts of the Trust for 1978 show an excess of expenditure over income for the year of £1,774.02.

Compared with 1977 this represents an additional deficit of £730.79, against £1,043.23, the deficit in 1977: the total income was £286.72 less than in the previous year and the total expenditure was £444.07 more.

During 1978 the last investment of £5,000 held by the Trust was redeemed but due to cash-flow pressures the Trust was unable to re-invest in a fresh Security. In consequence, no further investment income can be anticipated. At the same time, the Commission's secretariat continues to depend too heavily on volunteer help and on staff paid at token rates. This precarious situation cannot continue for long.

The appended accounts and balance sheets were adopted at the Annual General Meeting of the Trust held on 7 June 1979.

(Signed) F.G.W. JONES
Managing Director and Secretary

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR TO 31st DECEMBER, 1978

1977			
	SALES OF PUBLICATIONS		
694	International Code		837.39
6,457	Bulletin of Zoological Nomenclature		6,198.52
1	Opinions		13.95
7,152			7,049.86
350	INVESTMENT INCOME (Gross)		350.00
246	BANK DEPOSIT INTEREST		100.03
547	DONATIONS		508.22
8,295			8,008.11
	Less: ADMINISTRATION EXPENSES		
	Salaries & National Insurance		
3,262	Contributions	4,509.42	
1,421	Office Expenses	1,415.37	
75	Audit Fees	75.00	
4,758		5,999.79	
50	*Less:* Proportion Allocated to "Official Lists"	50.00	
4,708		5,949.79	

4,609		PRINTING & DISTRIBUTION OF PUBLICATIONS	3,813.40	
21		DEPRECIATION OF OFFICE EQUIPMENT	18.94	
	9,338			9,782.13
	1,043	EXCESS OF EXPENDITURE OVER INCOME FOR THE YEAR		1,774.02
	265	*Less:* Balance brought forward		–
	£ 778	DEFICIT carried to BALANCE SHEET		£1,774.02

"OFFICIAL LIST" SUSPENSE ACCOUNT FOR THE YEAR TO 31st DECEMBER 1978

2,735	BALANCE brought forward	2,707.82
22	SALES OF PUBLICATIONS	89.58
2,757		2,797.40
50	*Less:* Proportion of Administration Expenses	50.00
£2,707	BALANCE carried to Balance Sheet	2,747.40

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
BALANCE SHEET AS AT 31st DECEMBER, 1978

1977				
		FIXED ASSETS		
		OFFICE EQUIPMENT at cost	611.42	
		Less: Accumulated Depreciation	440.93	
189				170.49
		INVESTMENTS at cost		
		£5,000 City of Cambridge 7% 1978		
5,016		Redeemable Loan Stock		–
5,205				170.49
		CURRENT ASSETS		
636		Amounts due from Sales	2,211.35	
63		Income and other Taxes Recoverable	60.77	
3,977		Cash at Bank and in Hand	4,795.77	
	4,676			7,067.89
	9,881			7,238.38
		CURRENT LIABILITIES		
1,062		Sundry Creditors	1,458.73	
1,314		Subscriptions Received in Advance	25.00	
	2,376			1,483.73
	£7,505	**NET CURRENT ASSETS**		£5,754.65

		REVENUE RESERVES		
		GENERAL RESERVES		
£5,575		Balance at 31st December, 1977		4,797.50
–		*Less* Transfers – *Loss* on Loan Stock Redemption	16.23	
778		Income & Expenditure Account *DEFICIT*	1,774.02	1,790.25
4,797				3,007.25
2,708		"OFFICIAL LIST" SUSPENSE ACCOUNT		2,747.40
£7,505				£5,754.65

NOTE: The Stock of Publications has not been valued.

F.G.W. Jones) Members of the
) Management
F.J. Griffin) Committee

REPORT OF THE AUDITORS

In our opinion the above Balance Sheet and annexed Income and Expenditure Account give a true and fair view of the state of the Company's affairs as at the 31st December, 1978 and of the operating Deficit for the year ended on that date and comply with the Companies Acts, 1948 and 1967.

3, Great James Street,
Bedford Row,
London, WC1N 3DH.
6th August, 1979

MORLEY, GRAYRIGGE & CO.
Chartered Accountants

HERRERA'S FORMULAE ARE NOT NAMES. PROPOSED DIRECTION SUPPLEMENTARY TO DIRECTION 32. Z.N.(S.) 2133

By Hobart M. Smith & Rozella B. Smith *(Department of EPO Biology, University of Colorado, Boulder, Colorado 80309, USA)*

Direction 32 (*Ops. Decls. int. Comm. zool. Nom.* vol. 1(C): 307–328, 1956) placed on the Official Index of Rejected and Invalid Works in Zoological Nomenclature the work implied in Opinion 72, though not there referred to by name. This was the 'Nouvelle nomenclature des êtres organisés et des minéraux' published in instalments between 1901 and 1904 in the *Mem. Soc. cient. 'Antonio Alzate'* by Herrera.

2. This was, however, neither the first nor the only work in which Herrera applied the principles of his 'nouvelle nomenclature', namely to indicate the taxonomic affinities of a genus by adding a prefix or a suffix, or both, to its name. We have found an earlier work in which these principles were applied and have deposited a xerox copy of it in the library of the British Museum (Natural History). The work is a pamphlet entitled *Sinonimía vulgar y científica de los principales vertebrados mexicanos* por A.L. Herrera, Méjico, Oficina Tipográfica de Secretaría de Fomento, 31 pp., 1899.

3. In this rare, separately-published pamphlet, an alphabetically-arranged list of Spanish and Aztec common names of some 489 species of Mexican vertebrates provides scientific name equivalents in a unique form. No other information is given in the work, although a footnote (p.3) acknowledges construction of the list with consultation of the works published in 'La Naturaleza' by Alfredo Dugès, Francisco Sumichrast, José N. Rovirosa, and by Herrera himself; of those in the 'Anales del Museo', by Jesús Sánchez; the catalog of the Museo de Tacubaya by Laurencio y Beristain; and the catalogs of the Museo Nacional, again by Herrera. Dr. Herrera was internationally famed and is to the present time a nationally revered biologist in Mexico.

4. The scientific names that appear in this work were given with an abbreviated prefix preceding the generic name, indicating the class-group to which the name belongs; Mam, Ave, Rep, Batr, Pis, respectively indicating Mammalia, Aves, Reptilia, Amphibia and Pisces. Each generic name is given with a *-us* or *-s* termination to indicate that it belongs to the Animal Kingdom. The footnote explanation (p.3) is quite explicit: 'Seguimos la nueva nomen-

clatura; las abreviaturas que preceden á los nombres genéricos, *Mam., Av., Rep., Pis.*, significan Mamífero, Ave, Reptil, Batracio y Pez. La terminación *us* ó *s* indica que es animal.' No other details are given. The described system is used consistently throughout, with infrequent lapses; an exception is the prefix indicating birds, actually Ave, not Av. as stated in the footnote. An example of the names resulting from this procedure is 'Batrspelerpus mexicanus', not given in italics. Indeed, the only italics used were for the Aztec common names, e.g. *Axolotl, Aquaquetzpallin*, etc.

5. The list works very simply. Thus, we find '*Axolotl*, v. Ajolote', and under Ajolote we find 'Batramblystomus tigrinus'. Under 'Castor' we find 'Mamcastorus fiber'; under '*Coyotl*', 'v. Coyote' and under Coyote, 'Mamcanisus latrans'; under both 'Chinito' and '*Coquantototl*' we find 'v. Filomena', and under Filomena 'Aveampelisus cedrorum'. Herrera was thus adding prefixes and suffixes to generic names (*Castor* becomes Mam castor us; *Ampelis* becomes Av ampelis us) to convert each name into a taxonomic formula.

6. The names at first sight appear to comply with the Code (especially Articles 19 and 33) for availability, if they are considered emendations. Certainly they were deliberately created. Although it is clear that Herrera did not regard the prefixes as a part of the generic name, since he explicitly stated that they precede the generic name, they are printed as parts of the same words and must be treated as integral parts of them. The termination *-us* and *-s*, however, he apparently regarded as a part of the generic name, since often it was substituted for the proper termination; for example, *Ctenosaura* was rendered *Ctenosaurus* in one instance (although as *Ctenosauraus* in two others), and *Imantodes* as *Imantodus*, etc. Furthermore, in a work solely on vertebrates, as this is, no need existed to distinguish animal names from, for example, plant names. The intent, however short-lived, was to introduce a system of uniform endings differing between kingdoms, and uniform prefixes to indicate Classes. We are not aware whether in other works he proposed a parallel system for organisms other than animals, but as a zoologist he probably did not.

7. The 489 scientific names of the most common species of vertebrates in Mexico (no subspecies were mentioned) include 61 of fishes, 8 of amphibians, 54 of reptiles, 310 of birds and 56 of mammals. We have scrutinized the names for herpetozoans in detail, and can confirm that 6 emendations of amphibian generic names were introduced (*Ambystomus, Bufous, Hylaus, Ranaus, Spelerpus* and *Syphonopsus*, all preceded by *'Batr'*) and 26 reptile generic names (*Ameivas, Ancistrodonus, Batrachosomus, Boaus, Bothropsus, Chelonius, Cinosternonus, Coleonyxus, Corythophanesus,*

Ctenosauraus, Ctenosaurus, Dipsasus, Elapsus, Eumecesus, Eutainiaus, Helodermaus, Iguanaus, Imantodus, Leptophius, Oxybelus, Phrynosomus, Phymatolepisus, Pityophisus, Reginaus, Renaus, Scotophisus, all preceded by *'Rep'*). If these are regarded as available names, they are all junior synonyms of names in current use. In that case, all 32 emendations constitute a threat to nomenclatural stability, since they (1) could replace their senior synonyms should the latter be discovered to be unavailable; or (2) could be applied to genera or subgenera into which the taxa denoted by the current senior synonyms might be subdivided; or (3) could render invalid any homonym proposed after 1899.

8. The total number of new names in all vertebrate groups created in Herrera's work can be estimated by extrapolation from the amphibian-reptilian names, with 32 in 62. Thus, if the same proportion holds for other groups, there would be 150–160 for birds, 25–30 for mammals, and 30–35 for fishes – a total for all vertebrates of about 237–257 new names. If regarded as available, this body of emendations poses an intolerable threat to nomenclatural stability, completely devoid of taxonomic merit, neglected even by its own author. To deal with the names individually is to impose a totally unrewarding responsibility upon taxonomists, since none of the herpetological names, and presumably none of the others, has been entered in the standard guides to generic names (*e.g.* Neave, Waterhouse, Scudder, Schulze *et al.;* the latter nevertheless listed Herrera's work in the literature examined).

9. We have considered whether we should ask for this work to be suppressed under the plenary powers. However, having regard to Opinion 72 and Direction 32, and to the fact that the Sixth Draft of the Third Edition of the Code (November 1977) incorporates a provision giving general effect to that combined ruling, we have concluded that it is sufficient to ask for the work to be placed on the Official Index under the ordinary powers of the Commission. The International Commission on Zoological Nomenclature is accordingly requested to place the following work on the Official Index of Rejected and Invalid Works in Zoology with an endorsement that the designations for animals used in that paper are formulae, not names, and accordingly do not enter into zoological nomenclature: Herrera, A.L., 1899, Sinonimía vulgar y científica de los principales vertebrados mexicanos, Méjico, Oficina Tipográfica de la Secretaría de Fomento, 31pp.

BARBUS ALTIANALIS BOULENGER, 1900 AND *B. RUEPPELLI* BOULENGER, 1902 (PISCES, CYPRINIDAE); PROPOSED CONSERVATION UNDER THE PLENARY POWERS. Z.N.(S.) 2164.

By Gordon McGregor Reid *(Department of Biological Sciences, University of Sokoto, Sokoto, Northern Nigeria)*

During the course of a systematic investigation of African species of *Labeo* Cuvier, 1817 (Pisces, CYPRINIDAE) I came across a hitherto overlooked description of *L. rueppellii* from Lake Victoria (Pfeffer, 1896: 51–52). This description pre-dates that of *L. victorianus* Boulenger, 1901, the only *Labeo* species known from Lake Victoria. It appeared, at first sight, that I had uncovered a senior synonym for *L. victorianus.* I have since examined the *L. rueppellii* holotype (received from Dr. C. Karrer, *Zoologisches Museum, Humboldt-Universität, Berlin, D.D.R.*) and find that it is neither conspecific nor even congeneric with *L. victorianus.*

2. The *L. rueppellii* holotype agrees in all major details with Pfeffer's original description (he does not provide a figure), and particularly in such details as:

(1) a bony anterior ray in the dorsal fin, with a damaged tip;

(2) a semicircular fleshy process depending from the lower lip, i.e. the specimen is 'rubber lipped';

(3) long anterior and posterior barbels.

All three characters, in combination, are characteristic of certain *Barbus* species but of no *Labeo* species. Pfeffer, therefore, placed this new taxon in the wrong genus; it should be identified as a species of *Barbus* Cuvier & Cloquet, 1816 (CYPRINIDAE).

3. The only *Barbus* species with longitudinally striated scales hitherto known from Lake Victoria is *B. altianalis* Boulenger, 1900. The *L. rueppellii* holotype conforms well to the holotype of *B. altianalis* and is well within the normal range of variation for this species on all diagnostic characters (for which see Banister, 1973: 12–20). On both morphological and geographical grounds, then, there can be no doubt that the holotype of *L. rueppellii* Pfeffer and that of *B. altianalis* Boulenger are conspecific. This being so the latter taxon would take the name *Barbus rueppellii* (Pfeffer, 1896).

4. I suggest, however, that the specific name *rueppellii* Pfeffer, 1896, as used in the binomen *Labeo rueppellii,* should be suppressed on the following grounds:

(1) *Barbus altianalis* Boulenger is the widely used and accepted name for a commercial species of fish. In this respect, the

references listed at the end of this paper and marked with an asterisk satisfy the requirements of Art. 79b (*Bull. zool. Nom.* vol. 31: 87–89).

The type locality for *Barbus rueppellii* (Pfeffer) is Lake Victoria, and that for *B. altianalis* Boulenger is Lake Kivu and Ruzizi river. It follows from this that there would be a shift in type locality for the nominate subspecies which would result in further nomenclatural confusion, viz. the name *B. rueppellii rueppellii* (Pfeffer) would replace *B. altianalis radcliffii* Boulenger in Lake Victoria, while the name *B. rueppellii altianalis* (Pfeffer) would replace *B. altianalis altianalis* Boulenger in Lake Kivu and the Ruzizi river.

(2) *Barbus ruepelli* Boulenger, 1902, would become a junior secondary homonym of *Barbus rueppellii* (Pfeffer, 1896) and a replacement name for the Boulenger species would be required. The name *Barbus rueppelli* Boulenger, which is still erroneously used by some fishery workers for certain populations of *Barbus intermedius* Rüppell, 1837, is of uncertain status in the present state of knowledge of this group. It would certainly be imprudent to allow it to be replaced by an unused senior homonym.

5. For the above reasons the Commission is therefore requested to:

(1) use its plenary powers to suppress the specific name *rüppellii* Pfeffer, 1896, as published in the binomen *Labeo rüppellii*, for the purposes of both the Law of Priority and the Law of Homonymy, and to place it on the Official Index of Rejected and Invalid Specific Names in Zoology.

(2) place the following specific names on the Official List of Specific Names in Zoology:

(a) *altianalis* Boulenger, 1900, as published in the combination *Barbus altianalis;*

(b) *rueppelli* Boulenger, 1902, as published in the combination *Barbus rueppelli.*

REFERENCES

*BANISTER, K.E. 1973. A revision of the large *Barbus* (Pisces, Cyprinidae) of East and Central Africa. Studies on African Cyprinidae part II. *Bull. Br. Mus. nat. Hist.*, (Zool.) vol. 26(1): 1–148.

*_____ 1976. Two new species of large *Barbus* (Pisces, Cyprinidae) from Central Africa. *Bull. Br. Mus. nat. Hist.* (Zool.) vol. 30(5): 191–203.

*BEADLE, L.C. 1974. *The inland waters of tropical Africa:* 184, 210, 323. Longman, London.

BOULENGER, G.A. 1900. Diagnoses of new fishes discovered by Mr. J.E.S.

Moore in Lake Tanganyika. *Ann. Mag. nat. Hist.* (7) vol. 6: 479.

_____ 1901. On a small collection of fishes from Lake Victoria made by order of Sir H.H. Johnston, K.C.B. *Proc. zool. Soc. London* vol. 2: 159.

_____ 1902. Descriptions of new fishes from the collection made by Mr. E. Degen in Abyssinia. *Ann. Mag. nat. Hist.* (7) vol. 10: 423, 427, 428.

*_____ 1911. *Catalogue of the Fresh-water Fishes of Africa in the British Museum (Natural History).* vol. 2: 36.

*FRYER, G. & ILES, T.D. 1972. *The Cichlid Fishes of the Great Lakes of Africa:* 234. Oliver & Boyd, Edinburgh.

*GREENWOOD, P.H. 1966. *The Fishes of Uganda:* 60–63. (2nd Edn.) The Uganda Society, Kampala.

*KUDHANGANIA, A.W. & CORDONE, A.J. 1974. Batho-spatial distribution patterns and biomass estimate of the major demersal fishes in Lake Victoria. *Afr. J. Trop. Hyrobiol. Fish.* vol. 3(1): 16, 20, 22, 24, 25.

*LOWE-McCONNELL, R.H. 1975. *Fish Communities in Tropical Freshwaters:* 127, 128, 130, 132, Longman, London & New York.

PFEFFER, G. 1896. Die Fische Ost-Afrikas. In: *Die Thierwelt Deutsch-Ost-Afrikas und der Nachbargebiete.* (3) K. Moebius [ed.]: 51–52. Wirbelthiere.

*POLL, M. 1953. Lac Tanganyika poissons (non Cichlidae). *Résult. scient. Explor. hydrobiol. Lac Tanganyika.* (3) vol. 5(A): 88.

*ROBERTS, T.R. 1975. Geographical distribution of African freshwater fishes. *Zool. J. Linn. Soc.* vol. 57 (4): 289.

RÜPPELL, E. 1837. Neuer Nachtrag von Beschreibungen und Abbildungen neuer Fische, im Nil entdeckt. *Mus. senckenb.* vol. 2: 7–8.

*WORTHINGTON, E.B. 1932. Scientific results of the Cambridge Expedition to the East African Lakes. 2. Fishes other than Cichlidae. *J. Linn. Soc. (Zool.)* vol. 38 (258): 124–127.

CEUTORHYNCHUS GERMAR, 1824, AND *RHINONCUS* SCHONHERR, 1826 (INSECTA, COLEOPTERA): PROPOSED CONSERVATION AND DESIGNATION OF TYPE SPECIES BY USE OF THE PLENARY POWERS. Z.N.(S.) 2219

By Hans Silfverberg *(Zoological Museum of the University, Helsinki, Finland)*

In this application it is proposed that the current usage of the generic name *Ceutorhynchus* Germar, 1824, and *Rhinoncus* Schönherr, 1826, in the CURCULIONIDAE, should be maintained by setting aside the earliest type-species designations of each of them and by suppressing two earlier unused senior synonyms, *Falciger* Dejean, 1821, and *Campylirhynchus* Dejean, 1821.

2. *Ceutorhynchus* Germar, 1824: 214, was established for 50 species including *Curculio assimilis* Paykull, 1792: 69, and *Curculio quercus* Fabricius, 1787: 102. The type species, designated by Schönherr, 1826: 22, is *Curculio quercus* Fabricius, 1787, a junior homonym (of *Curculio quercus* Linnaeus, 1758) replaced by *Curculio dryados* Gmelin, 1790: 1748. Schönherr, 1837: 282, established a new genus *Coeliodes* with *quercus* Fabricius as type species, and used *Ceutorhynchus* for *assimilis* Paykull. Westwood, 1838: 38, designated *Rhynchaenus asperifoliarum* Gyllenhal as type species of *Ceutorhynchus,* but that species was not originally included. Thomson, 1859: 140, designated *assimilis* as type species of *Ceutorhynchus.*

3. *Mononychus* Germar, 1824: 241, was established for *Curculio pseudacori* Fabricius, 1792: 408, and a new species *Mononychus salviae.* The type species, designated by Schönherr, 1826: 22, is *Curculio pseudacori* Fabricius, 1792. Both *C. pseudacori* and *M. salviae* have been synonymized with *Curculio punctumalbum* Herbst in Fuessly, 1784: 74.

4. *Rhinoncus* Schönherr, 1826: 299, was established as a subgenus ('Stirps') of *Ceutorhynchus* for 9 species including *Curculio quadrituberculatus* Fabricius, 1787: 100, *Curculio pericarpius* Linnaeus, 1758: 380, and *Curculio castor* Fabricius, 1792: 408. The type species, by original designation, is *C. quadrituberculatus* Fabricius. Schönherr, 1837: 282, treated *Rhinoncus* as a genus which included among others *pericarpius* and *castor.* Westwood, 1838: 38, designated *pericarpius* as type species, and Thomson, 1859: 139, designated *castor.*

5. *Phytobius* Dejean, 1835: 282, was established for 11 species including *Curculio quadrituberculatus* Fabricius, but no

type species was designated. Schönherr, 1836: 458, gave a description of the genus and also included *quadrituberculatus*. There was, however, no fixation of type species until Thomson, 1859: 138, designated *quadrituberculatus*.

6. *Coeliodes* Schönherr, 1837: 282, was established having *Curculio quercus* Fabricius as type species by original designation.

7. *Falciger* Dejean, 1821: 84, was established for *Curculio assimilis* Paykull and 46 other species which nowadays are placed in various genera including *Mononychus* Germar, 1824; *Coeliodes* Schönherr, 1837; *Ceutorhynchus* Germar, 1824; *Poophagus* Schönherr, 1837; and others. *Falciger* has not been used subsequently and no type species has been designated. In order to fix this genus I here designate *Curculio assimilis* Paykull as the type species.

8. *Campylirhynchus* Dejean, 1821: 84, was established for *Curculio pericarpius* Linnaeus and six other species which nowadays are placed in *Rhinoncus* Schönherr, 1826, and *Phytobius* Dejean, 1835. *Campylirhynchus* has not been used subsequently and no type species has been designated. In order to fix this genus I here designate *Curculio pericarpius* Linnaeus, 1758: 380, as its type species.

9. The interpretation of *Ceutorhynchus* and *Rhinoncus* by Schönherr, 1837 is incorrect according to the rules of the Code, but it was accepted and has been in current use ever since, for example Dalla Torre & Hustache, 1930; Porta, 1932; Wagner, 1938; Hoffmann, 1950; Horion, 1951; Lindroth, 1960; Arnoldi, Zaslavsky & Ter-Minasian, 1965; Hansen, 1965; Dieckmann, 1972; and Smreczyński, 1974. If the rules are strictly adhered to, the genus *Coeliodes* will be known as *Ceutorhynchus*, and *Phytobius* will be *Rhinoncus*. *Falciger* could then, with suitable type designation, be resurrected for *Ceutorhynchus* sensu auctorum, and similarly *Campylirhynchus* for *Rhinoncus* sensu auctorum. But such a procedure is not in the interest of stability. It is preferable to set aside Schönherr's original designations for *Ceutorhynchus* and *Rhinoncus*, and suppress the two Dejean names as unused senior synonyms. In that way current use can be preserved.

10. The International Commission on Zoological Nomenclature is therefore requested:

(1) to use its plenary powers:

(a) to set aside all fixations of type species for *Ceutorhynchus* Germar, 1824, made prior to that of Thomson, 1859: 140, thereby validating the designation by Thomson of *Curculio assimilis* Paykull, 1792, as type species of that genus;

(b) to set aside all fixations of type species for *Rhinoncus* Schönherr, 1826, made prior to that of

Westwood, 1838: 38, thereby validating the designation by Westwood of *Curculio pericarpius* Linnaeus, 1758, as type species of that genus;

(c) to suppress *Falciger* Dejean, 1821 (a senior objective synonym of *Ceutorhynchus* Germar, 1824) for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(d) to suppress *Campylirhynchus* Dejean, 1821 (a senior objective synonym of *Rhinoncus* Schönherr, 1826) for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place on the Official List of Generic Names in Zoology:

(a) *Ceutorhynchus* Germar, 1824 (gender: masculine), type species by subsequent designation by Thomson, 1859, and validated by use of the plenary powers in (1) (a) above, *Curculio assimilis* Paykull, 1792;

(b) *Rhinoncus* Schönherr, 1826 (gender: masculine), type species by subsequent designation by Westwood, 1838, and validated by use of the plenary powers in (1) (b) above, *Curculio pericarpius* Linnaeus, 1758;

(c) *Mononychus* Germar, 1824 (gender: masculine), type species by subsequent designation by Schönherr, 1826, *Curculio pseudacori* Fabricius, 1792 (a junior subjective synonym of *Curculio punctumalbum* Herbst, 1784);

(d) *Phytobius* Dejean, 1835 (gender: masculine), type species by subsequent designation by Thomson, 1859, *Curculio quadrituberculatus* Fabricius, 1787;

(e) *Coeliodes* Schönherr, 1837 (gender: masculine), type species by original designation, *Curculio quercus* Fabricius, 1787 (a junior primary homonym replaced by *Curculio dryados* Gmelin, 1790);

(3) to place on the Official List of Specific Names in Zoology:

(a) *assimilis* Paykull, 1792, as published in the binomen *Curculio assimilis* (specific name of the type species of *Ceutorhynchus* Germar, 1824);

(b) *pericarpius* Linnaeus, 1758, as published in the binomen *Curculio pericarpius* (specific name of the type species of *Rhinoncus* Schönherr, 1826);

(c) *punctumalbum* Herbst, 1784, as published in the binomen *Curculio punctumalbum* (senior subjective synonym of *Curculio pseudacori* Fabricius, 1792, the type species of *Mononychus* Germar, 1824);

(d) *quadrituberculatus* Fabricius, 1787, as published in the binomen *Curculio quadrituberculatus* (specific name of the type species of *Phytobius* Dejean, 1835);

(e) *dryados* Gmelin, 1790, as published in the binomen *Curculio dryados*, the oldest available synonym of *Curculio quercus* Fabricius, 1787, rejected because of primary homonymy (specific name of the type species of *Coeliodes* Schönherr, 1837);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Falciger* Dejean, 1821, as suppressed by the use of plenary powers in (1) (c) above;

(b) *Campylirhynchus* Dejean, 1821, as suppressed by the use of the plenary powers in (1) (d) above.

REFERENCES

ARNOLDI, L.V., ZASLAVSKY, V.A. & TER-MINASIAN, M.E. 1965. 82. Sem. Curculionidae – Dolgonosiki. *Opred. Faune SSSR* vol. 89: 485–621.

v. DALLA TORRE, K.W. & HUSTACHE, A. 1930. Curculionidae: Ceuthorrhynchinae. *Coleopt. Catal.*, vol. 113: 1–150.

DEJEAN, P.F.M. 1821. *Catalogue de la collection de Coléoptères de M. le Baron Dejean.* Paris, 1–136.

———— 1835. *Catalogue des Coléoptères de la collection de M. le Comte Dejean.* 2 ed., Paris 257–360.

DIECKMANN, L. 1972. Beiträge zur Insektenfauna der DDR: Coleoptera – Curculionidae: Ceutorhynchinae. *Beitr. Entomol.* vol. 22: 3–128.

FABRICIUS, J.C. 1787. *Mantissa Insectorum*, T.I. Hafniae, 1–348.

———— 1792. *Entomologia Systematica*, vol. 1, Pars. 2. Hafniae, 1–538.

FUESSLY, J.C. 1784. *Archiv der Insektengeschichte*, Heft 5. Zürich, 1–151.

GERMAR, E.F. 1824. *Insectorum species novae aut minus cognitae.* Halae, 1–624.

GMELIN, J.F. 1790. *Caroli Linnaei Systema Naturae, editio XIII aucta, reformata.* Vol. 1, pt. 4: 1517–2227 Lipsiae.

HANSEN, V. 1965. Biller XXI. Snudebiller. *Danmarks Fauna*, vol. 69: 1–524.

HOFFMANN, A. 1950. Coléoptères Curculionides (Première Partie). *Faune de France*, vol. 52: 1–486.

HORION, A. 1951. *Verzeichnis der Käfer Mitteleuropas* vol. 2: 277–536. Stuttgart.

LINDROTH, C.H. (ed.) 1960. *Catalogus Coleopterorum Fennoscandiae et Daniae.* Lund, 1–476.

LINNAEUS, C. 1758. *Systema Naturae,* ed. X. Holmiae, 1–823.

PAYKULL, G. 1792. *Monographia Curculionum Sueciae.* Upsaliae, 1–151.

PORTA, A. 1932. *Fauna Coleopterorum Italica V.* Rhynchophora – Lamellicornia. Piacenza, 1–476.

SCHÖNHERR, C.J. 1826. *Curculionidum dispositio methodica.* Lipsiae, 1–338.

_____ 1836. *Genera et species Curculionidum.* Vol. 3. Parisiis, 1–861.

_____ 1837. *Genera et species Curculionidum.* Vol. 4. Parisiis, 1–1124.

SMRECZYŃSKI, S. 1974. Chrzaszcze – Coleoptera 98e. Ryjkowce – Curculionidae: Barini, Coryssomerini, Ceutorhynchini. *Klucze oznacz. owadów Polski* vol. 83: 1–180.

THOMSON, C.G. 1859. *Skandinaviens Coleoptera,* I. Tom. Lund, 1–290.

WAGNER, H. 1938. Monographie der paläarktischen Ceuthorrhynchinae (Curcul.) (part). *Entomol. Bl.,* vol. 34: 145–172.

WESTWOOD, J.O. 1838. *Synopsis of the genera of British Insects* (part). London, 1–48.

INDEX TO AUTHORS

	Page
Banse, K.	146
Baturo, B.	30
Benson, C.W.	180
Bernardi, G.	71
Bray, R.S.	17
Burch, J.B.	196
Byers, G.W.	40
Cernohorsky, W.O.	17,147
Clark, D.L.	202
Clarke, A.H.	140
Clausen, P.J.	42
Cooper, M.R.	37
Cutler, B.	4
Davis, G.M.	145
Dunn, D. Fautin	53
Edwards, G.B.	4
Galiano, M.E.	236
Garnham, P.C.C.	17
Gelder, R.G. Van	5
Groves, C.P.	9,239
Henningsmoen, G.	226
Holloway, J.D.	15
Holthuis, L.B.	158
Hulsemann, K.	53
Jaanusson, V.	226
Kashin, G.N.	154
Kelly, S.R.A.	200
Killick-Kendrick, R.	17
Lane, H. Richard	57
Melville, R.V. (Secretary)	11,63, 66,71,144,240
Menzies, J.I.	231
Merrill, G.K.	201
Morrison, J.P.E.	139
Mroczkowski, M.	197
Muir, A.I.	187
Napier, P.H.	239
Nye, I.W.B.	226
Reid, G. McGregor	249
Rhodes, F.H.T.	201
Robinson, G.S.	15
Rosewater, J.	140
Sabrosky, C.W.	191
Silfverberg, H.	161,167, 171,252
Smetana, A.	44
Smith, H.M. & Smith R.B.	199,246
Stein, C.B.	141
Stimson, A.F.	198
Stubblefield, C.J.	226
Tomkovich, P.S.	154
Trewavas, E.	155
Tyler, M.J.	231
Underwood, G.L.	198
Williams, R.B.	175
Wright, C.W.	37
Ziegler, W.	57
Zweifel, R.G.	231

LIST OF DECISIONS IN THIS VOLUME

Opinion		*Page*
1125	*Ceratophyllus soricis* Dale, 1878 (Insecta: Siphonaptera): designation of a neotype under the plenary powers	22
1126	*Tanagra cyanea* Linnaeus. 1766 (Aves) conserved	24
1127	*Planaria montenigrina* Mrazek, 1904 (Platyhelminthes) given nomenclatural precedence over *Phagocata cornuta* Shishkov, 1903	27
1128	*Platyrhacus* Koch, 1847 (Diplopoda): designation of *Platyrhacus fuscus* Koch, 1847 as type species	73
1129	*Vulpes* Frisch, 1775 (Mammalia) conserved under the plenary powers	76
1130	*Liliocerís* Reitter, 1912 (Insecta; Coleoptera): correction of type species	79
1131	*Amphisbaena mildei* Peters, 1878 (Reptilia): suppressed under the plenary powers	82
1132	Two works by Hemprich & Ehrenberg, 1828, suppressed under the plenary powers; *Heterotis* Rüppell, 1829, *ex* Ehrenberg MS (Pisces) validated under the plenary powers and placed on the Official List with *Arapaima* Müller, 1843 (Pisces)	85
1133	Suppression under the plenary powers of names for genera and species of Amphipoda proposed by Rafinesque between 1814 and 1820	91
1134	*Zerynthia* Ochsenheimer, 1816 (Insecta; Lepidoptera): conserved under the plenary powers	102
1135	*Murex lotorium* Linnaeus, 1758 (Gastropoda); ruling on interpretation	105
1136	*Cicadetta strepitans* Kirdaldy, 1909 (Insecta; Homoptera): conserved	107
1137	*Aphis gossypii* Glover, 1877 (Insecta; Homoptera) validated under the plenary powers	109
1138	*Giraffa camelopardalis australis* Rhoads, 1896 (Mammalia) suppressed	111
1139	*Paraonis* Grube, 1873 (Polychaeta, PARAONIDAE): designation of a type species under the plenary powers	114
1140	*Sesarma rubripes* Rathbun, 1897 (Crustacea Decapoda) given precedence over *Sesarma trapezium* Dana, 1852, under the plenary powers	119
1141	*Donacilla* Blainville, 1819 (Bivalvia) suppressed; *Donacilla* Philippi, 1836, *Mesodesma* Deshayes, 1832 and *Semele* Schumacher, 1817 (Bivalvia) added to the Official List	122
1142	Family-group names based on *Platystoma* Meigen, 1803 given precedence over those based on *Achias* Fabricius, 1805 (Diptera)	125
1143	*Kerrichiella* Rosanov, 1965 (Hymenoptera): designation of a type species under the plenary powers	130
1144	*Phloeotribus* (Coleoptera: SCOLYTIDAE) ruled to be a justified emendation of *Phloiotribus* Latreille, 1796	132

1145 *Dryocoetes* Eichhoff, 1864 (Coleoptera, SCOLYTIDAE): conserved under the plenary powers 149
1146 *Xyleborus* Eichhoff, 1864 (Coleoptera, SCOLYTIDAE): conserved under the plenary powers 151

NAMES PLACED ON OFFICIAL LISTS AND INDEXES IN DECISIONS PUBLISHED IN VOLUME 36.

Official List of Generic Names in Zoology.

Achias Fabricius, 1805
Arapaima Müller, 1843
Crangonyx Bate, 1859
Donacilla Philippi, 1836
Dryocoetes Eichhoff, 1864
Heterotis Rüppell, 1829 ex Ehrenberg MS.
Kerrichiella Rosanov, 1965
Levinsenia Mesnil, 1897
Mesodesma Deshayes, [1832]
Orchestia Leach, 1814
Paraonis Grube, 1873
Phloeotribus Latreille, 1796
Phronima Latreille, [1802]
Phrosina Risso, 1822
Platyrhacus C.L. Koch, 1847
Platystoma Meigen, 1803
Semele Schumacher, 1817
Synurella Wrzesniowski, 1877
Talitrus Bosc, [1802]
Talorchestia Dana, 1852
Vulpes Frisch, 1775
Zerynthia Ochsenheimer, 1816

Official List of Specific Names in Zoology.

autographus, Bostrichus, Ratzeburg, 1837
brissonii, Fringilla, Lichtenstein, 1823
coleoptratus, Thysanus, Kerrich, 1953
cornea, Mactra, Poli, 1795
cornuta, Phagocata, Shishkov,1903
cyanea, Tanagra, Linnaeus, 1766
donacia, Mactra, Lamarck, 1818
fasciatus, Gammarus, Say, 1818
fulgens, Aonides, Levinsen, 1884
fuscus, Platyrhacus Koch, 1847
gammarellus, Oniscus, Pallas, 1766
gigas, Sudis, Schinz, 1822
gossypii, Aphis, Glover, 1877
gracilis, Aonides, Tauber, 1879
gracilis, Talitrus, Dana, 1852
locusta, Cancer, Linnaeus, 1758
longicornis, Talitrus, Say, 1818
lotorium, Murex, Linnaeus, 1758
merdigera, Chrysomela, Linnaeus, 1758
minus, Gammarus, Say, 1818
montenigrina, Planaria, Mrazek,1904
niloticus, Sudis, Cuvier, 1829 ex Ehrenberg MS.
oculatus, Achias, Fabricius, 1805
platensis, Orchestia, Krøyer, 1844
polonica, Synurella, Wrzesniowski, 1877
polyxena, Papilio, [Denis & Schiffermueller], 1775
proficua, Tellina, Pulteney, 1799
rubripes, Sesarma, Rathbun, 1897
saltator, Cancer, (Gammarellus) Montagu, 1808
scarabaeoides, Scolytus, Bernard, 1788
sedentarius, Cancer, Forsskål, 1775
seminationis, Musca, Fabricius, 1775
semilunata, Phrosina, Risso, 1822
soricis, Ceratophyllus, Dale, 1878
strepitans, Cicadetta, Kirkaldy, 1909
subterraneus, Crangonyx, Bate, 1859
trapezium, Sesarma, Dana, 1852
vulpes, Canis, Linnaeus, 1758

Official List of Family-Group Names in Zoology.

ACHIDAE Fleming, 1821
LEVINSENIIDAE Mesnil & Caullery, 1898
ORCHESTIIDAE Leach, 1814
PARAONIDAE Cerruti, 1909
PHRONIMIDAE Rafinesque, 1815
PHROSININAE Dana, 1852
PLATYRHACIDAE Pocock, 1895
PLATYSTOMATIDAE Schiner, 1862
TALITRIDAE Rafinesque, 1815

Official Index of Rejected and Invalid Generic Names in Zoology.

Anodius Motschulsky, 1860
Dactylocera Latreille, 1829
Donacilla Blainville, 1819
Parnalius Rafinesque, 1815
Phloeotrogus Motschulsky, 1863
Phloiotribus Latreille, 1796
Pisitoe Rafinesque, 1814
Psammylla Rafinesque, 1814
Sperchius Rafinesque, 1820
Vulpes Skjöldebrand, 1777

Official Index of Rejected and Invalid Specific Names in Zoology.

australis, Giraffa camelopardalis, Rhoads, 1896
bispinosa, Pisitoe, Rafinesque, 1814
circezandis, Aphis, Fitch, 1870
cyanea, Loxia, Linnaeus, 1758
levifrons, Pisitoe, Rafinesque, 1814
littoralis, Psammylla, Rafinesque, 1817
lucidus, Sperchius, Rafinesque, 1820
mildei, Amphisbaena, Peters, 1878
minimus, Vulpes, Skjöldebrand, 1777
obscura, Cicada [sic] *cingulata* var. Hudson, 1891
potamogeti, Pephredo, Rafinesque, 1817
rivularis, Lepleurus, Rafinesque, 1820
saarensis, Vulpes minimus, Skjöldebrand, 1777
sorecis, Ceratophyllus, Dale, 1878

INDEX TO KEY NAMES

Achias Fabricius, 1805 (Opinion 1142) 125
ACHIDAE Fleming, 1821 (Opinion 1142) 125
acuta, Pleurocera, Rafinesque, 1831 . . . . . 142, 196
acutus, Pleurocerus, Rafinesque *in* Blainville, 1824 142
altianalis, Barbus, Boulenger, 1900 249
AMPHICTENIDAE Johnston, 1865 147
Anaspis Müller, 1764 161
Anisarthria Stephens, 1830 167
Anodius Motschulsky, 1860 (Opinion 1145) 149
annularis, Bungarus, Daudin, 1803 200
APARALLACTINAE Bourgeois, 1968 (1893) 199
apiarius, Attelabus, Linnaeus, 1758 164
Arapaima Müller, 1843 (Opinion 1132) 85
armata, Metridia, Boeck, 1865 55
audax, Attus, Hentz, 1845 4
assimilis, Curculio, Paykull, 1792 252
australis, Giraffa camelopardalis, Rhoads, 1896 (Opinion 1138) . . . 111
autographus, Bostrichus, Ratzeburg, 1837 (Opinion 1145) 149
avellanae, Calycophthora, Amerling, 1862, 1863 63
avellanae, Phytoptus, Nalepa, 1899 63

beautempsii, Edwardsia, de Quatrefages, 1842 175
Bellota Peckham & Peckham, 1892 236
bispinosa, Pisitoe, Rafinesque, 1814 (Opinion 1133) 91
brissonii, Fringilla, Lichtenstein, 1823 (Opinion 1126) 24
brunneolus, Pseudotolithus, Jordan & Richardson, 1909 155
bruxellense, Bembidion, Wesmaël, 1835 198
BUCEPHALIDAE Poche, 1907 34
Bucephalus Baer, 1827 30
BUNGARIDAE Fitzinger, 1826 200
Bungarus Daudin, 1803 200

caerulescens, Carabus, Linnaeus, 1758 197
caesum, Ptilium, Erichson, 1845 168
Campylirhynchus Dejean, 1821 254
Ceutorhynchus Germar, 1824 252
circezandis, Aphis, Fitch, 1870 (Opinion 1137) 109
Cistena Leach, 1816 147
Clerus Müller, 1764 161
Coeliodes Schönherr, 1837 254
coleoptratus, Thysanus, Kerrich, 1953 (Opinion 1143) 130
Cophixalus Boettger, 1892 231
cornea, Mactra, Poli, 1795 (Opinion 1141) 122
cornuta, Phagocata, Shishkov, 1903 (Opinion 1127) 27
coryli, Phytoptus, Frauenfeld, 1865 63
coryligallarum, Phytoptus, Targioni-Tozzetti, ?1885-1886 63
Crangonyx Bate, 1859 (Opinion 1133) 91

cupreus, Carabus, Linnaeus, 1758 197
curvicornu, Neokentroceras, Spath, 1922 38
cyanea, Loxia, Linnaeus, 1758 (Opinion 1126) 24
cyanea, Tanagra, Linnaeus, 1766 (Opinion 1126) 24

Dactylocera Latreille, 1829 (Opinion 1133) 93
desmaresti, Ogygia, Brongniart *in* Brongniart & Desmarest, 1822 ... 227
dianthus, Actinia, Ellis, 1768 55
Dicranodonta Woods, 1899 200
dilatatus, Trilobus, Brünnich, 1781 227
donacia, Mactra, Lamarck, 1818 (Opinion 1141) 122
Donacilla Blainville, 1819 (Opinion 1141) 122
Donacilla Philippi, 1836 (Opinion 1141) 122
dryados, Curculio, Gmelin, 1790 255
Dryocoetes Eichhoff, 1864 (Opinion 1145) 149

Edwardsia Costa, 1834 175
Edwardsia de Quatrefages, 1841 175
EDWARDSIIDAE Andres, 1881 175
ELAPIDAE Boie, 1827 200
Eriophyes Siebold, 1851 63
exsculpta, Ochthera, Loew, 1862 42

Falciger Dejean, 1821 254
fasciatus, Gammarus, Say, 1818 (Opinion 1133) 92
fasciata, Pseudoboa, Schneider, 1801 200
fergusoni, Conus, G.B. Sowerby III, 1873 147
ferruginea, Tipula, Scopoli, 1763 40
ferruginea, Tipula, Fabricius, 1805 40
flavicornis, Chrysomela, Fabricius, 1787 171
flavicornis, Chrysomela, Suffrian, 1851 171
flavipes, Chrysomela, Linnaeus, 1767 162
formicina, Chirothecia?, Taczanowski, 1879 236
fracticornis, Staphylinus, O.F. Müller, 1776 47
frontalis, Mordella, Linnaeus, 1758 162
fulgens, Aonides, Levinsen, 1884 (Opinion 1139) 114
fulgidus, Staphylinus, Fabricius, 1787 44
fuscus, Platyrhacus Koch, 1847 (Opinion 1128) 73

galeatum, Monostoma, Rudolphi, 1819 34
gammarellus, Oniscus, Pallas, 1766 (Opinion 1133) 92
Gasterostomum Siebold, 1848 30
Gauropterus C.G. Thomson, 1860 44
gigas, Sudis, Schinz, 1822 (Opinion 1132) 85
Gnathodus Pander, 1856 ..... 57, 201
goodhalli, Ammonites, J. Sowerby, 1820 37
gossypii, Aphis, Glover, 1877 (Opinion 1137) 109
gracilis, Aonides, Tauber, 1879 (Opinion 1139) 114
gracilis, Talitrus, Dana, 1852 (Opinion 1133) 92

Gyrohypnus Leach, 1819 44
Gyrohypnus Samouelle, 1819 45

Hemprich & Ehrenberg, 1828a. *Symbolae Physicae seu Icones et Descriptiones Piscium* (Opinion 1132) 85
Hemprich & Ehrenberg, 1828b. *Symbolae Physicae seu Icones et Descriptiones Zootomicrorum* (Opinion 1132) 85
herbstii, Panopeus, H. Milne Edwards, 1834 158
Herrera, A.L., 1899 246
Hesperites Pompeckj, 1895 240
Heterotis Rüppell, 1829 ex Ehrenberg MS. (Opinion 1132) 85
HYDROPHIIDAE Fitzinger, 1843 199
hypsipyle, Papilio, Fabricius, 1776 (Opinion 1134) 102

Kerrichiella Rosanov, 1965 (Opinion 1143) 130

lamarckii, Donacilla, Philippi, 1836 (Opinion 1141) 122
Lampyris Müller, 1764 161
leucophaea, Simia, F. Cuvier, 1807 239
levifrons, Pisitoe, Rafinesque, 1814 (Opinion 1133) 91
Levinsenia Mesnil, 1897 (Opinion 1139) 114
LEVINSENIIDAE Mesnil & Caullery, 1898 (Opinion 1139) 115
Lilioceris, Reitter, 1912 (Opinion 1130) 79
linearis, Staphylinus, Olivier, 1794 48
littoralis, Psammylla, Rafinesque, 1817 (Opinion 1133) 91
littoreus, Cancer (Gammarus) (Opinion 1133) 92
locusta, Cancer, Linnaeus, 1758 (Opinion 1133) 92
longicornis, Talitrus, Say, 1818 (Opinion 1133) 92
longus, Calanus, Lubbock, 1854 54
lotorium, Murex, Linnaeus, 1758 (Opinion 1135) 105
lucidus, Sperchius, Rafinesque, 1820 (Opinion 1133) 91
lunulatus, Uriechis, Peters, 1854 200
Luperus Müller, 1764 161

melas, Dermestes, Marsham, 1802 167
merdigera, Chrysomela, Linnaeus, 1758 (Opinion 1130) 79
"Meropia" Rafinesque, 1815 154
MEROPIDAE Rafinesque, 1815 154
Mesodesma Deshayes, [1832] (Opinion 1141) 122
Metridia Boeck, 1863 (Copepoda) 54
METRIDIIDAE Carlgren, 1893 (Anthozoa) 53
METRIDIIDAE Sars, 1902 (Copepoda) 53
METRIDINIDAE Sars, 1902 (Copepoda) 54
Metridium Blainville, 1824 (Anthozoa) 53
Metridium Oken, 1815 53
milei, Amphisbaena, Peters, 1878 (Opinion 1131) 82
minimus, Vulpes, Skjöldebrand, 1777 (Opinion 1129) 76
minus, Gammarus, Say, 1818 (Opinion 1133) 92
moluccensis, Microhyla achatina var. Peters & Doria, 1878 234

Mononychus Germar, 1824 252
montenigrina, Planaria, Mrazek, 1904 (Opinion 1127) 27
mosquensis, Gnathodus, Pander, 1856 ..... 57, 201
mutillarius, Clerus, Fabricius, 1775 163

Neokentroceras Spath, 1921 37
nibe, Sciaena, Jordan & Thompson, 1911 155
niloticus, Sudis, Cuvier, 1829 ex Ehrenberg MS (Opinion 1132) ... 85
noctiluca, Cantharis, Linnaeus, 1758 162

obscura, Cicada [sic] *cingulata,* var. Hudson, 1891 (Opinion 1136) 107
oculatus, Achias, Fabricius, 1805 (Opinion 1142) 125
Ogygia Brongniart, 1817 226
Ogygia Hübner, [1821] 226
OGYGINAE Raymond, 1913 229
Ogygiocaris Angelin, 1854 226
OGYGIOCARINAE Raymond, 1913 229
Ogygites Tromelin & Lebesconte, 1876 226
Orchestia Leach, 1814 (Opinion 1133) 92
ORCHESTIIDAE Leach, 1814 (Opinion 1133) 91
Oreophryne Boettger, 1895 231
Othius, Stephens, 1829 44
Oxytrema Rafinesque, 1819 141

panope, Cancer, Herbst, 1801 158
Panopeus H. Milne Edwards, 1834 158
PARAONIDAE Cerruti, 1909 (Opinion 1139) 114
Paraonis Grube, 1873 (Opinion 1139) 114
Parnalius Rafinesque, 1815 (Opinion 1134) 102
peckhami, Bellota, Galiano, 1978 236
Pectinaria Lamarck, 1818 146
pericarpius, Curculio, Linnaeus, 1758 254
Phidippus Koch, 1846 4
Phloeotribus Latreille, 1796 (Opinion 1144) 132
Phloeotrogus Motschulsky, 1863 (Opinion 1146) 151
Phloiotribus Latreille, 1796 (Opinion 1144) 132
Phronima Latreille, [1802] (Opinion 1133) 92
PHRONIMIDAE Rafinesque, 1815 (Opinion 1133) 93
Phrosina Risso, 1822 (Opinion 1133) 92
PHROSININAE Dana, 1852 (Opinion 1133) 93
Phytobius Dejean, 1835 254
Phytoptus Dujardin, 1851 63
Pisitoe Rafinesque, 1814 (Opinion 1133) 93
platensis, Orchestia, Krøyer, 1844 (Opinion 1133) 92
PLATYRHACIDAE Pocock, 1895 (Opinion 1128) 73
Platyrhacus C.L. Koch, 1847 (Opinion 1128) 73
Platystoma Meigen, 1803 (Opinion 1142) 125
PLATYSTOMATIDAE Schiner, 1862 (Opinion 1142) 125
Pleurocera Rafinesque, 1818 ..... 139, 196

PLEUROCERIDAE Fischer, 1885 139
Pleurocerus Blainville, 1824 141
plumigera, Oscinis, Loew, 1860 191
polonica, Synurella, Wrzesniowski, 1877 (Opinion 1133) 92
polymorphus, Bucephalus, Baer, 1827 30
Polynoe Savigny, 1818 187
polyxena, Papilio, [Denis & Schiffermueller], 1775 (Opinion 1134) 102
potamogeti, Pephredo, Rafinesque, 1817 (Opinion 1133) 91
proficua, Tellina, Pulteney, 1799 (Opinion 1141) 122
Prohysteroceras Spath, 1921 37
Psammylla Rafinesque, 1817 (Opinion 1133) 91
pseudogallarum, Acarus, Vallot, 1836 64
Ptenidium Erichson, 1845 167
Ptilium Gyllenhal, 1827 167
punctulatus, Staphylinus, Goeze, 1777 45
punctumalbum, Curculio, Herbst, 1784 252
pusillum, Scaphidium, Gyllenhal, 1808 167

quadrituberculatus, Curculio, Fabricius, 1787 252

reticulata, Semele, Schumacher, 1817 (Opinion 1141) 122
Rhinoncus Schonherr, 1826 252
Rhipidocotyle Diesing, 1858 30
rivularis, Lepleurus, Rafinesque, 1820 (Opinion 1133) 91
rubripes, Sesarma, Rathbun, 1897 (Opinion 1140) 119
rueppelli, Barbus, Boulenger, 1902 249
ruficauda, Muscicapa, Swainson, 1838 180
rupestris, Cicindela, Linnaeus, 1767 198
rüppellii, Labeo, Pfeffer, 1896 249

saarensis, Vulpes minimus, Skjöldebrand, 1777 (Opinion 1129) 76
saltator, Cancer, Montagu, 1808 (Opinion 1133) 91
scarabaeoides, Scolytus, Bernard, 1788 (Opinion 1144) 132
scolopendrina, Polynoe, Savigny, 1822 187
sedentarius, Cancer, Forsskål, 1775 (Opinion 1133) 92
Semele Schumacher, 1817 (Opinion 1141) 122
semilunata, Phrosina, Risso, 1822 (Opinion 1133) 92
seminationis, Musca, Fabricius, 1775 (Opinion 1142) 125
senckenbergiana, Oreophryne, Boettger, 1895 232
senilis, Priapus, Linnaeus, 1761 55
silvestris, Simia, Schreber, 1800 240
sorecis, Ceratophyllus, Dale, 1878 (Opinion 1125) 22
soricis, Certatophyllus, Dale, 1878 (Opinion 1125) 22
Sperchius Rafinesque, 1820 (Opinion 1133) 91
strepitans, Cicadetta, Kirkaldy, 1909 (Opinion 1136) 107
subterraneus, Crangonyx, Bate, 1859 (Opinion 1133) 93
sylvestris, Simia, Link, 1795 239
Synurella Wrzesniowski, 1877 (Opinion 1133) 92

TALITRIDAE Rafinesque, 1815 (Opinion 1133) 91
Talitrus Bosc, [1802] (Opinion 1133) 91
Talorchestia Dana, 1852 (Opinion 1133) 92
texanus, Gnathodus, Roundy, 1926 ..... 60, 201
tibialis, Chrysomela, Duftschmid, 1825 171
tibialis, Chrysomela, Suffrian, 1851 171
trapezium, Sesarma, Dana, 1852 (Opinion 1140) 119
Trichodes Herbst, 1792 163

unicolor, Cyornis, Blyth, 1843 180
URIECHINAE Cope, 1893 198
Uriechis Peters, 1854 198

variegatus, Salticus, Lucas, 1833 4
verrucosa, Pleurocera, Rafinesque, 1820 ..... 139, 197
verrucosa, Sphenophryne, Boulenger, 1898 233
versicolor, Platysma, Sturm, 1824 197
vitis, Phytoptus, Pagenstecher, 1857 63
vulgaris, Carabus, Linnaeus, 1758 198
Vulpes Frisch, 1775 (Opinion 1129) 76
Vulpes Skjöldebrand, 1777 (Opinion 1129) 76
vulpes, Canis, Linnaeus, 1758 (Opinion 1129) 76

wordiei, Prohysteroceras, Spath, 1922 37

Xantholinus Dejean, 1821 44
Xyleborus Eichhoff, 1864 (Opinion 1146) 151

Zerynthia Oschsenheimer, 1816 (Opinion 1134) 102

CORRIGENDA

Vol. 36:

page 63, lines 10 and 26: for *Phytoptus avellanae* Nalepa, 1899 read *Phytoptus avellanae*, Nalepa, 1889.
page 64, line 22:

page 64, line 39: for Nalepa, 1898 read Nalepa, 1889.

page 87, line 28: for Mr. R.K. Broke read Mr. R.K. Brooke.

page 93, line 38: for *Psammylla* Rafinesque, 1814 read *Psammylla* Rafinesque, 1817.

PARTICULARS OF DATES OF PUBLICATION OF THE SEVERAL PARTS IN WHICH THE PRESENT VOLUME WAS PUBLISHED.

Part No.	*Contents of Part (pages)*	*Date of Publication*
1	1– 64	1st July 1979
2	265–134	1st August 1979
3	135–192	25th October 1979
4	193–269	18th February 1980

INSTRUCTIONS TO BINDER

The present volume should be bound up as follows:
1 – 269, T.P. I–VI

Note: The wrappers (covers) of the four parts should be bound in at the end of the volume.

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

VOLUME 36

LONDON:

Printed by Order of the International Trust for Zoological Nomenclature
and
Sold on behalf of the International Commission on Zoological Nomenclature by the International Trust at its Publication Office, c/o British Museum (Natural History), Cromwell Road, London SW7 5BD
1979 – 1980

(All rights reserved)

Readers of the Bulletin are reminded that the only regular source of income to finance the work of the Commission comes from sales of this periodical, and that this is insufficient to meet the needs of zoologists for the services provided by the Commission and to maintain the office at an efficient level. Help in the form of donations and bequests will, therefore, be received with gratitude.

The International Trust for Zoological Nomenclature wishes to express its appreciation of the facilities provided by the Trustees of the British Museum (Natural History) for the Secretariat of the Commission.

©1980 THE INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
Printed in England by INPRINT OF LUTON (Designers & Printers) LTD.